

The Industrialisation of Soviet Russia Volume 6: The Years of Progress

The Soviet Economy, 1934-1936

Oleg Khlevnyuk; R. W. Davies; Stephen G. Wheatcroft

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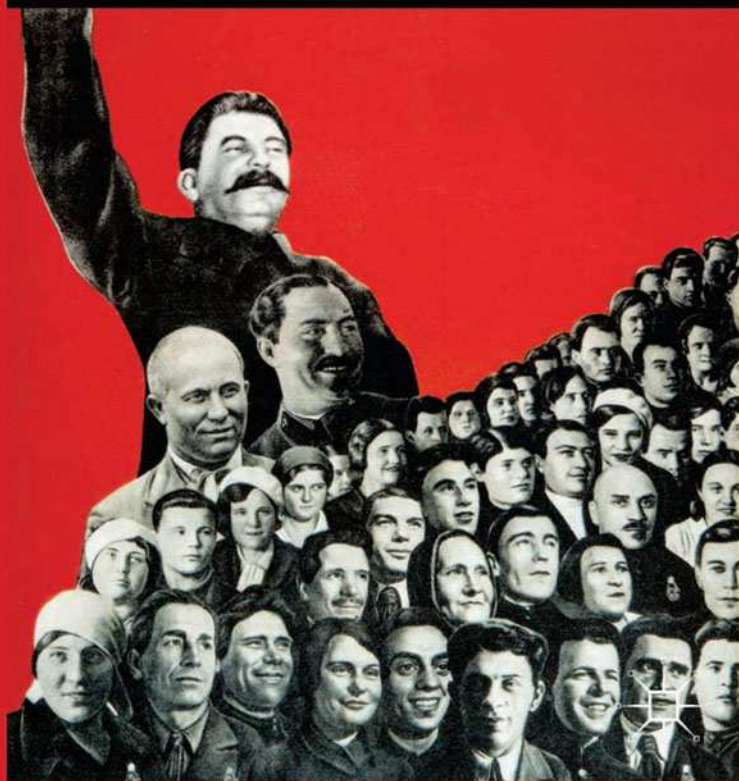
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R.W. DAVIES

THE INDUSTRIALISATION
OF SOVIET RUSSIA 6

THE YEARS
OF PROGRESS

THE SOVIET ECONOMY, 1934-1936



THE YEARS OF PROGRESS

By R. W. Davies

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THE INDUSTRIALISATION OF SOVIET RUSSIA 6

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PROGRESS:
THE SOVIET ECONOMY,
1934–1936

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In fond memory of
FRANCES REBECCA DAVIES
(1931–2011)

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PREFACE

The final two volumes in this series, volumes 6 and 7, deal with economic developments between 1934 and 1939. This was the period in which the high level of investment during the first five-year plan was brought to fruition. The Soviet Union was transformed into a major industrial power. The foundations were laid for Soviet victory in the second world war and its emergence as one of the two major world powers after the war. In the years covered by these volumes basic industries – coal, oil and iron and steel – expanded at a particularly rapid rate, and the production of high-quality steel more than quadrupled. Non-ferrous metal industries were established, including rare metals previously not produced in the USSR. Simultaneously the production of a great variety of engineering products greatly expanded. The machine-tool industry hardly existed before the first world war, but by 1932 it produced some 20,000 machine tools, and by the eve of the second world war some 58,000, including over 2,000 automatics and semi-automatics which had not been produced at all in 1932 (see Table 17(e)).

This was still not yet a fully-industrialised economy. On the eve of the second world war it still depended on the import of a high proportion of non-ferrous metals (see Table 20 (c)) and sophisticated machine tools. But Soviet industry provided the basis for the extraordinarily rapid development of the defence industry. Investment in armaments expanded at a moderate pace in 1934 and 1935, but from 1936 onwards it increased far more rapidly than investment as a whole: (measured in current prices)

	1934	1935	1936	1937A	1937B	1938	1939
All investment (annual percentage increase)	30.4	-15.4	30.0	-9.3	-13.0	8.6	4.8
Investment in armaments industries (annual percentage increase)	26.4	18.9	62.1	50.0	68.6	50.0	20.3
Investment in armaments industries as per cent of all investment	3.2	3.2	4.2	6.9	8.9	12.6	14.8

Source: see Table 8 in vol. 6 and equivalent table in vol. 7. The different methods of calculation in 1934–1937A and in 1937B–1939 will be discussed in vol. 7.

The production of armaments increased at a similar rate. It amounted to 3.5 per cent of all gross industrial production in 1932, and 4.5 per cent in 1936; and by 1939 had increased to 12.9 per cent. Particularly full data for 1940, including arms production by civilian industry and deducting civilian production by the armaments industry, show that in that year armaments constituted 17.4 per cent of all gross industrial production.¹ The data of the state budget for all kinds of defence expenditure, including the maintenance of the army and navy, showed a similar progression, Defence outlays increased from 9.7 per cent of state budgetary expenditure in 1934 to 16.1 per cent in 1936, 25.6 per cent in 1939 and 32.6 per cent in 1940.²

Although there is thus an important continuity between 1934–36 and 1937–39 – the extraordinarily rapid increase in defence expenditure in face of the fascist threat – the two periods covered by vols. 6 and 7 were substantially different. The years covered by the present volume were a time of relative moderation. Stalin had established his unchallengeable authority in the Politburo, but the political regime was relatively relaxed and considerable experimentation took place in the economy. As a result of the increasing availability of newly-constructed plant, and the partial maturation of the work force, these were years of intensive industrial development, in which the rapid industrial growth depended on increasing productivity of labour rather than the growth of the number employed. Although the threat of war looming over the economy led to an expansion of military expenditure, it proved possible to increase greatly the production of consumer goods and to expand the social services, resulting in a considerable improvement of the standard of living. This was greatly assisted by the circumstance that all branches of agriculture began to recover from the disasters of the previous four years. A threatening famine, due to the very poor harvest of 1936, was prevented owing to the availability of large grain stocks. The emigré Russian economist Naum Jasny correctly designated 1934–36 as ‘the three “good” years’.

Politically, a sharp turn towards increased repression was marked by the Zinoviev–Kamenev trial of August 1936 and the replacement in September of Yagoda by Yezhov as People’s Commissar of Internal Affairs. This was the prelude to the new situation which will be dealt with in volume 7. In 1937 and 1938 the vast majority of the

¹ RGAE, 4372/94/1461, 114, cited in Simonov (1996), 154.

² See Harrison and Davies (1997), 372.

existing generations of economic managers were dismissed and most of them were executed, and mass repression was carried out on an unprecedented scale. The years 1937 to 1939, to be dealt with in volume 7, were a time of tragic conformity.

Throughout these two volumes industrial production is cited in the official figures at 1926/27 prices. These are by far the most convenient data in which to discuss the changes in industrial development. But the reader should bear in mind that they give an especially favourable view of Soviet growth.³ Alternative estimates by Western economists⁴ are as follows for the growth between 1932 and 1937 (1932=100, all in 1928 or 1926/27 prices, which give a higher figure than measurement in 1937 prices):

Official Soviet index	221
Seton	210
Hodgman	216
Nutter	186

I am exceedingly grateful to Oleg Khlevnyuk, who provided material and analysis on the Gulag and related matters, and to Stephen Wheatcroft, who performed the same role in relation to agriculture; and to both of them for providing information and comments on many aspects of Soviet development.

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I am also most grateful to other colleagues who assisted me with information and advice, including Julian Cooper, Paul Gregory, Mark Harrison (whose assistance in preparing the manuscript for publication was particularly valuable), Melanie Ilić, Christopher Joyce and Andrei Markevich (who both collected material for me in the Russian archives), Viktor Kondrashin, Judith Pallot, Lewis Siegelbaum, Arfon Rees, Mark Tauger and the late Derek Watson. Valuable assistance was provided by Russian archivists, including Elena Tyurina, the director of RGAE, Lyudmilla Kosheleva and Larissa Rogovaya; and by Philip Hillyer.

³ The reasons are explained in Davies, Harrison and Wheatcroft, eds. (1994), 30–2 and 138–41.

⁴ See *ibid.* 292–3.

CHAPTER ONE

THE XVII PARTY CONGRESS AND THE SECOND FIVE-YEAR PLAN

(A) THE BACKGROUND

The XVII party congress met in Moscow from January 26 to February 10, 1934. This was the end, or almost the end, of three years of severe economic and political crisis and disastrous famine, associated with rapid industrialisation; this crisis is discussed in volumes 4 and 5 of the present work. Though famine conditions continued in certain areas in the first six months of 1934 (see vol. 5, pp. 266–7, 411–12), the reasonable harvest of 1933, and the more moderate economic policies pursued in industry and elsewhere since the summer of 1932, brought to an end the worst of the famine. The currency was stabilised, and from the spring of 1933 industry began to develop more rapidly.

The second five-year plan began to be drawn up in a more or less realistic form at the beginning of 1933. The crucial problem was of course to determine a feasible rate of growth of industrial production and capital investment. Following the abandonment of the impossibly high targets of 1930–31, the central committee plenum of January 1933 had agreed that in 1933–37 the average annual rate of growth of industrial production should be planned at 13–14 per cent as compared with 21–22 per cent in the first five-year plan (see vol. 4, p. 332). No figure was included for capital investment. In further discussions in the first months of 1933, contradictory proposals about investment were put forward. The various commissariats sought as usual to increase the amount of investment they received, but on February 20, 1933, Mezhlauk on behalf of Gosplan sent a warning report to Stalin and Molotov pointing out that extra investment would require the allocation of additional food and other resources. The Politburo concurred with his objections, and on March 2, 1933, resolved in relation to the 1934 plan:

In view of the attempts of certain People's Commissariats to fix the volume of capital investment at a higher level than that which

corresponds to the total sum of 18,000 million rubles available for capital investment [in 1933], as was fixed by the January plenum of the central committee and the central control commission, the Politburo states that such attempts are unconditionally inadmissible.¹

Encouraged by this prudent decision, the Mezhlauk commission resolved that the annual increase in production in 1933–37 should be limited to 13 per cent and that the plan for pig-iron production in 1937 should be reduced from 18 to 15 million tons.² On May 28, 1933, Kuibyshev and Mezhlauk sent a letter to Stalin defending the figure of 15 million tons, and the associated figures for crude and rolled steel. Kuibyshev argued that a higher figure would involve increased investment in Narkomtyazhprom and would increase its annual growth of production to 16 per cent a year, and continued:

As the smelting of 15.2 million tons of pig iron and 11.6 million tons of rolled steel will satisfy other branches at the agreed rate of growth, and is sufficiently tense from the point of view of the new equipment required, especially for crude and rolled steel, Gosplan requests permission to carry out further work on the five-year plan on the basis of this limit.³

No reply to this letter has been traced, and the discussions in June and July 1933 in Gosplan continued to be based on the higher figure of 18 million tons of pig iron in 1937.⁴ It was this figure which was included in the directives to the XVII congress six months later.

Gosplan continued, however, to argue for a lower rate of investment. At the end of June 1933 it proposed that investment in 1933–37 should amount to a mere 97,000 million rubles as compared with the 135,000 requested by the commissariats.⁵ This was the lowest figure to emerge in the discussion, and assumed that annual investment during the five years would be only slightly higher than in 1933. But after further discussion within Gosplan, the proposed figure was increased to 120,000 million rubles.⁶ At a Gosplan meeting chaired by Kuibyshev

¹ RGASPI, 17/3/917, 7.

² RGAE, 4372/92/14, 62–63.

³ RGAE, 4372/92/13, 98–103.

⁴ RGAE, 4372/92/18, 1–2.

⁵ RGAE, 4372/92/17, 366.

⁶ RGAE, 4372/92/17, 366.

on July 19, 1933, G. Smirnov, responsible for capital investment within Gosplan, sought to reduce it to 110,000 million, on the grounds that sufficient resources were not available to back up the higher figure.⁷ On July 26 a further Gosplan meeting adopted a 'final' compromise figure of 112,750 million rubles.⁸

It eventually emerged that this was by no means a final figure. On November 15, the Politburo decided to convene the XVII congress on January 15, 1934 (it eventually met on January 26). This meant that a decision about production and investment in the five-year plan could no longer be postponed. The Politburo discussion on Molotov's and Kuibyshev's reports to the congress was held on December 20, and considered a plan which was greatly increased as compared with the previous proposals. It included an annual growth of industrial production by over 18 per cent as compared with the previous 13–14 per cent, and a volume of capital investment in 1933–37 amounting to 133,000 million rubles as compared with 112,750.⁹

This decision was evidently taken by senior political leaders without consultation with the key departments within Gosplan. On December 20, the day on which the Politburo met, Lauer, the respected long-established head of the metals department of Gosplan, sent an angry letter to Kuibyshev, Mezhlauk and Petropavlovskii (the secretary of the Gosplan party cell):

I feel it necessary to draw your attention to the fact that work in Gosplan on finalising the second five-year plan has been organised in a completely unsatisfactory way, and will not enable the plans to be of good quality. We received an order to check the five-year plan tables and to return them with corrections in the course of *one day*. Some people received additional information from comrade Gaister about the changes you have made in the initial plan. But these changes are so serious that they affect all branches of the economy, and it is impossible simply to correct the tables, it is necessary to undertake a new interconnection of every sector (every branch) with the economy as a whole. As far as I know, the rates of growth of industrial production have been sharply changed (18 instead of 14 %), the relation of Group A and Group B has been changed, and capital investment in the final year has been sharply increased

⁷ RGAE, 4372/92/17, 367, 443–442.

⁸ RGAE, 4372/92/18, 76–78, 85.

⁹ RGASPI, 558/1/3103.

(34,000 million instead of 26,000 million). The output of machine-building has been sharply increased. This requires a new balance of building materials, a new metal balance, and different requirements of fuel and power.

After this diatribe, Lauer rather tamely requested five or six days rather than one day to do the job.¹⁰ Not surprisingly, the work took much longer. As late as December 31, Gaister reported additional changes to Stalin and the central committee, further complicating the work of the Gosplan staff. These included increases proposed by Stalin himself in the production of consumer goods by heavy industry and investment in the light and food industries (from 7,700 to 14,500 million rubles), and he also proposed an increase in the supply of locomotives and wagons to the railways.¹¹

It was the more ambitious version of the plan which was submitted to the congress a month later. Industrial production would increase by 19 per cent a year, and investment in the five years would amount to 133.4 thousand million rubles.

(B) THE CONGRESS PROCEEDINGS AND THE FIVE-YEAR PLAN

The Politburo decided to present the congress to the public as a demonstration of the triumph of the Soviet system and of the economic policies of the past few years. On the first day of the congress, January 26, the main article on the front page of *Pravda* was headed 'The Congress of Victors', and the congress was known by this name throughout the Stalin period.

According to the party Statute, congresses were supposed to meet annually. But there had already been a two-year gap between the XIV congress (December 1925) and the XV congress (December 1927), and a two-and-a-half-year gap between the XV congress and the XVI congress, which convened in June–July 1930. Then the XVII congress was convened three-and-a-half years after the XVI congress. These delays were never explained.

The XVII congress was attended by 1,227 voting and 739 consultative delegates. The fate of most of the delegates was anything but

¹⁰ GARF, 5446/22/24, 114, 114ob.

¹¹ GARF, 5446/22/27, 230–234.

victorious. A special commission reported at the beginning of 1956 that 1,103 of the total of 1,966 delegates had been arrested, mainly in 1937–38, and 848 of these had been executed. And of the 139 full and candidate members of the central committee elected at the congress, 101 were executed and five committed suicide.¹²

The publication of this tragic information in 1956 was used to suggest that the party and its leading members were the main victims of the repressions; the full story (to be discussed in vol. 7) was revealed only after the fall of the Soviet Union. These revelations also gave rise to the widespread notion that an attempt was made at the congress to replace Stalin as general secretary of the party.¹³ Many versions of this notion appeared at the time and later, based on rumour rather than hard evidence. The least implausible account was that during the congress some party leaders discussed the possibility of replacing Stalin by S. M. Kirov, but Kirov refused. According to this account, during the election of the central committee at the congress some 270–300 votes were cast against Stalin, who ordered the destruction of these voting slips. This account was used to claim that Kirov's murder in December 1934 and the consequent execution of many of the congress delegates were carried out on Stalin's direct orders.¹⁴ Many years after the event the papers of the election commission of the congress were examined and there was no evidence that more than three delegates voted against Stalin. However, 166 slips of the voting delegates at the congress were absent. They may have been destroyed, or the delegates may actually have abstained from voting.¹⁵ The other anomaly in the voting at the time of the congress was that no mention was made of Stalin's election to the post of general secretary. After the XVI congress in 1930, the relevant central committee resolution included as a separate item 'the plenum confirmed cde. Stalin as general secretary of the party'. The new central committee at the XVII congress was merely reported to have elected a secretariat of four persons, listed in the following order: Stalin, L. M. Kaganovich, Kirov (who remained secretary of the Leningrad

¹² *Reabilitatsiya*, i (2000), 317, 411.

¹³ *Reabilitatsiya*, ii (2003), 372–4.

¹⁴ This version appeared in Mikoyan's memoirs (Mikoyan (1999), 592–3) at a time when it had already been disproved.

¹⁵ *Izvestiya TsK*, 7, 1989, 114–21. Lenoe (2010), 610, points out that 134 voting delegates did not return ballots at the XVI and 43 at the XV Congresses, and suggests that the particularly high failure to return ballots in 1934 may have been due to a flu epidemic.

regional party committee) and A. A. Zhdanov (who relinquished his post as secretary of the Gor'kii regional party committee).¹⁶

In spite of these anomalies, there is little doubt that the more extreme suggestions of a plot against Stalin were a legend, and that the effect of the congress as a whole was to strengthen Stalin's position in the party, to remove elements of democracy and collective leadership within the party, and to increase the centralisation of political power. Kaganovich's report 'Organisational Questions', delivered on February 6, announced important changes in the party Statute. The congress was now to meet only once in three years (though in practice its next meeting was not held for another five years!). The central control commission, a joint agency with Rabkrin, which had the same nominal status as the central committee, was now replaced by a commission of party control, attached to the central committee and headed by a central committee secretary, and Rabkrin was abolished.¹⁷ Stalin, whose report on the work of the central committee was the first item on the agenda, declared at the end of the session that the discussion had shown '*the complete unity of views of the party leaders*' and that there had been '*no disagreements at all with the report*', and brazenly concluded to immense applause:

*The question arises whether after this there is any need for a reply to the discussion? I think there is no such need. Allow me then not to reply to the discussion.*¹⁸

However, in spite of this enthusiastic presentation of Soviet success, some speeches at the congress implicitly criticised aspects of previous policy by attributing them to excesses of the local authorities, though throughout the congress no direct or indirect reference was made to the famine. P. P. Postyshev, then second secretary of the Ukrainian party, for example, condemned the mass repressions in the countryside in the following terms:

It must be stated firmly and specifically that, in these years of sudden change, repressions were the main method of 'leadership' of many Ukrainian party organisations ... And the enemy certainly used this method of 'leadership', and on a very considerable scale, to stir up

¹⁶ P, July 14, 1930, February 11, 1934.

¹⁷ *XVII s"ezd* (1934), 525–66.

¹⁸ *XVII s"ezd* (1934), 269.

some groups of collective farmers and individual peasants against collectivisation, and against the party and Soviet power.¹⁹

These remarks indicate one of the major reasons for the adoption of a more moderate policy. In previous years the party had been at odds with a considerable section of the population, and it now sought to reduce social tension and limit the repressive policy.

External factors were also a reason for displaying moderation and presenting the USSR as democratic. The seizure of power by Hitler, and the threat from Japan, led the USSR to seek to draw closer to France and its allies. A few weeks before the party congress the Politburo decided to join the League of Nations and seek a regional agreement to mutual defence against aggression (see vol. 4, pp. 358–61). At the congress Stalin referred to the substantial improvement in relations between the USSR, France and Poland, and the establishment of normal relations with the USA, while insisting that the USSR ‘was oriented in the past and is oriented at present on the USSR and the USSR alone’.²⁰

The restoration of peace in the party was an important element in party policy. Since the previous spring a number of members of former oppositions had been restored to some degree of favour at the price of fully capitulating to Stalin (see vol. 4, pp. 363–4). Shortly before the congress, on December 12, 1933, the Politburo agreed that Zinoviev and Kamenev should be offered the opportunity to join the party through a Moscow district, and on December 20 it agreed that Preobrazhensky should be readmitted to the party.²¹

At the congress a number of prominent former members of oppositions repudiated their earlier views and declared their loyalty to Stalin and his policies. A distinguishing feature of most of these speeches was that they did not simply declare their support for party policy but offered quite rational explanations of their change of mind. This is very different from the political trials of 1936–38, where some of the same people presented themselves as traitors to the party and hirelings of capitalism. On the third day of the congress Lominadze and Bukharin spoke from the left and the right respectively. Lominadze explained that the ‘leftist’ views that he had advocated for over two-and-a-half years on China, on the

¹⁹ *XVII s'ezd* (1934), 67.

²⁰ *XVII s'ezd* (1934), 13–14.

²¹ RGASPI, 17/3/936, 5, 15.

inner-party regime and on peasant policy had overestimated the strength and the danger of NEP and provided the basis for the right-‘left’ bloc of Syrtsov and Lominadze.²² Bukharin, in a lengthy address, described the great successes of Soviet technology, with which his recent work in charge of research and development in heavy industry had been concerned, and praised party policy towards agriculture:

The great service of our party leadership and of Stalin personally is that they precisely determined the historical moment at which the storm attack should begin, its stages and its operational management.

He condemned forthrightly the policy and tactics of the Right opposition, of which of course he had been the most prominent member:

One of the sharpest Parthian arrows launched by the opposition, which bordered on a crime, was accusing the party regime of the military-feudal exploitation of the peasantry. This was one of those poisonous slogans which could have disorganised to the maximum those who were storming the capitalist heights, and which was particularly dangerous in connection with the danger of war.²³

The final section of his speech warned presciently and in very strong terms of the danger presented by Germany under Hitler, ‘who is openly calling for the destruction of our country’, and by Japan. ‘Hitler wants *to drive us into Siberia*, and the *Japanese* imperialists state that they want to drive us out of *Siberia*, so that probably the entire 160 million population of our country would have to be located on one of the blast furnaces of Magnitogorsk.’²⁴

The most remarkable speech from a former oppositionist came from Preobrazhensky, who had been a leading figure in the Left opposition since 1923 and its main economic adviser. He explained that he had not been at the congress for six or seven years and that then he had spoken against party policy. He now condemned Trotsky’s rejection of Socialism in One Country (on which he had

²² *XVII s’ezd* (1934), 118–19. For the Lominadze–Syrtsov affair see vol. 3, pp. 411–15 and *The Lost Politburo Transcripts* (2008), 78–96 (Khlevniuk).

²³ The Parthian Empire fought against the Romans and others; the Parthian archers fired their shots while retreating by turning back towards the advancing enemy.

²⁴ *XVII s’ezd* (1934), 124–9.

always been ambiguous) and his own former policy of 'primary socialist accumulation', which he now admitted would have broken the alliance with the peasantry:

Collectivisation – that is the heart of the matter! Did I predict collectivisation? I did not. In the form of collectivisation the party carried out the very great task of transforming millions of peasant households, and of assisting the peasant economy by flinging huge amounts into the countryside in the form of the output of our industry, of huge financial resources, and of organisational assistance from soviet agencies and the party.²⁵

The congress was also addressed with apologies and expressions of loyalty by Rykov, Tomsky, Radek, Zinoviev and Kamenev. These speeches were a demonstration both of Stalin's unchallenged authority and of the new policy of reconciliation within the party: Stalin referred to the 'exceptional ideological, political and organisational cohesion of our party ranks'.²⁶ The party saw the rehabilitation of many leading figures who had been Stalin's opponents as a first step towards the gradual rehabilitation of rank-and-file former oppositionists and the end of repressions and party cleansings. Kirov, towards the end of his speech at the congress, uttered the encouraging words 'The basic difficulties are behind us.' This statement must have been welcomed by many delegates as presaging a time of stability and reconciliation.²⁷

This shift in policy was associated at the congress with the consolidation of the changes already undertaken in economic policy. Two issues were strongly emphasised. First, the wider use of economic methods of administration, and of economic incentives. Stalin, in the section of his report dealing with trade, insisted that 'goods are produced in the last resort not for production but for consumption', and praised the improvements in trade which had taken place as a result of rivalry (*sorevnovanie*) between different trading agencies, and the introduction of commercial trade. ('Commercial trade' was the term used for state and cooperative trade at prices higher than the prices of rationed goods or than the lower so-called 'normal' prices of industrial consumer goods which were informally

²⁵ *XVII s"ezd* (1934), 236–9.

²⁶ *XVII s"ezd* (1934), 259.

²⁷ *XVII s"ezd* (1934), 259.

rather than formally rationed.) He strongly criticised 'leftist chatter' about the introduction of direct product exchange and the abolition of money. He argued that 'money is an instrument of bourgeois economics which Soviet power has taken into its own hands and adapted to the interests of socialism'. Direct product exchange was a matter for the distant future, and would be a result of 'an ideally-organised Soviet trade, which we do not have now and which we shall not achieve quickly'.²⁸

This general idea was developed in more specific terms by Mikoyan, People's Commissar for Supply. He stated that to use the police to struggle against high prices at bazaars was 'useless', and that the best way for the state to put pressure on market prices was to develop state trade. He told the delegates that Stalin had proposed to 'reduce prices on the kolkhoz market by exerting pressure from state economic intervention'. The growth of the 'free sale' of products by the state was an important precondition for the abolition of consumer rationing:

The most fundamental improvement in supply would be to open up the closed shops and begin to sell without ration cards ... We would not waste so much paper, and ration cards would not be misused.

Mikoyan nevertheless admitted that closed rationed sales would continue for a long time.²⁹ The XVII party congress made no specific commitment about the abolition of rationing. The second five-year plan merely cautiously stated that the great expansion of retail trade and the trade network during the plan 'will create in its turn all possibilities for the preparation of the abolition of the rationed issue of goods'.³⁰ This clearly implied that rationing would be abolished only after the end of the plan – i.e. in 1938 or later. But although the abolition of rationing was not proposed at the congress, such statements posed the idea that it was politically necessary. These arguments in favour of the abolition of rationing were repeated when the decision was taken to abolish bread rationing as soon as ten months after the congress.

The second issue emphasised at the congress was the rejection of 'petty-bourgeois equalisation', already a firm plank of party policy since Stalin's 'six conditions' speech of June 1931 (see vol. 4, pp. 71–2).

²⁸ *XVII s'ezd* (1934), 26–7.

²⁹ *XVII s'ezd* (1934), 180–1, 184.

³⁰ *Vtoroi* (1934), i, 383; this volume was sent to press on September 1, 1934.

This policy was vigorously endorsed at the congress not only for industry but also in relation to the kolkhozy. Stalin sharply criticised the imposition of agricultural communes, in which all production was socialised, explaining that 'the present-day commune emerged on the basis of a low level of technology and a poor supply of goods', and that as a result it 'practised equalisation and paid little attention to the everyday needs of its members'. In Stalin's opinion, communes, 'the higher form of the kolkhoz movement', 'will grow out of the developed and profitable artel'. The artel' put together 'the personal day-to-day interests of collective farmers with their social interests', and therefore 'in present conditions it is the only correct form for the kolkhoz movement'.³¹ This approach provided the basis for encouraging the development of the personal household plots (the *usad'by*). It would lead in the next five years to a substantial growth of production and was a major factor in the gradual emergence of the countryside from the severe crisis.

Molotov in his report to the congress announced that agricultural output would double in the second five-year plan. This decision was based on an unjustified optimism about the prospects for rural development. In particular, it assumed that the grain yield would increase to 10.6 *tsentners* a hectare in 1937 as compared with an average yield of 7.5 *tsentners* in 1928–32.³² Another major agricultural theme at the congress was the livestock crisis. Stalin in his opening report already produced figures frankly showing the great decline of livestock, though he attributed the decline to kulak influence. He assumed that the decline would be quickly overcome. One of the draft versions of the congress resolution stated that the meat problem would be solved by the end of the five-year plan, and Stalin wrote in the margin 'that's a long time'.³³ In consequence this proposition did not appear in the congress decision on the five-year plan, which stated that livestock output must increase by 225 per cent in 1933–37.³⁴

The recognition of the need to increase the standard of living after its considerable decline in previous years, together with the need to provide incentives for increased production, led to the

³¹ *XVII s"ezd* (1934), 29.

³² *XVII s"ezd* (1934), 360. The yield for 1928–32 was in fact less than 7.5 *tsentners* a hectare.

³³ RGASPI, 81/3/94, 14.

³⁴ *XVII s"ezd* (1934), 663.

decision that during the second five-year plan the production of consumer goods (Group B) must increase more rapidly than the production of means of production (Group A). This, together with the proposed increase in agricultural production, led to optimistic plans to increase trade turnover by two-and-a-half times and double real wages.³⁵ Other measures were also included which would improve living standards – an increase in expenditure on culture and welfare, and on housing, and the introduction of compulsory universal seven-year education. In these ways the authorities hoped to provide incentives for improving labour efficiency and increasing the level of skill of the working population.

As we have seen, in the optimistic version of the plan presented to the congress industrial production would grow by 19 per cent a year in 1933–37, and investment in the five years would amount to 133, 400 million rubles. These figures were the result of a compromise. The industrial commissariats received more investment, but also agreed to achieve a higher rate of industrial growth. But this decision did not suit the People's Commissars in charge of industry; and of course it also ran contrary to the January 1933 directives of the central committee. The discussion continued at the congress itself. On February 4, Ordzhonikidze made his famous intervention objecting to delegates' proposals to increase the plan still further, instead proposing that the plans for major industries should be cut. Industrial production as a whole should increase not by 19 but by 16.5 per cent a year. Following this intervention, Mikoyan on behalf of the food industry and Lyubimov on behalf of light industry also proposed that their production plans should be reduced.³⁶

The archives do not reveal how this decision was taken. But some indication of what happened is given by the preliminary transcript of the congress, which shows that the decision was taken at the last moment. The original transcript of Lyubimov's speech shows that it consisted of a survey of the development of light industry during the first five-year plan. But at the end of his speech, after his time had elapsed and he was given an extra five minutes to speak, he hastily and vaguely listed the changes being made to increase the light industry plan for 1933–37.³⁷ Similarly Pyatakov, soon to be appointed

³⁵ *XVII s"ezd* (1934), 668.

³⁶ *XVII s"ezd* (1934), 435–6, 439–41, 443–55.

³⁷ RGASPI, 59/2/33, 164–192. The published official record includes many changes.

first deputy commissar of Narkomtyazhprom, included a belated reference to Ordzhonikidze's proposal to reduce the plan for the production of railway wagons.³⁸ It should also be noted that in their speeches Ordzhonikidze and Mikoyan stated that the new proposals had been approved by the Politburo.³⁹ As there had been no Politburo sessions or meetings in Stalin's office at the beginning of February, it is likely that the decision was taken informally, probably between the conclusion of Kuibyshev's speech on the evening of February 3 and Ordzhonikidze's speech on the evening of February 4. Here an anonymous letter from Moscow published in the émigré Menshevik journal may well be relevant. If this is a true account, the commission referred to must have met quite hastily:

On the eve of the congress the draft of the five-year plan ... was distributed to all the delegates. But some of the directors who were promoted former workers (*vydvizhentsy*) expressed doubts to Stalin whether the rates could be achieved, and Stalin decided to take initiative in his hands and convene a meeting of factory directors, at which they were asked to state quite openly whether the proposed plan could be fulfilled. As a result of the discussion Stalin concluded that the plan should be reduced, particularly in view of the fact that the Soviet government would very probably have to carry out a 'war' plan parallel to the 'peace' plan. On Stalin's proposal a commission was set up consisting of Ordzhonikidze, Kuibyshev, Voroshilov, Pyatakov and 60 representatives of the corporations, and this re-examined all the norms of the second five-year plan and reduced them.⁴⁰

As a result of the changes made at the congress, the industrial production target for 1937 proposed by Molotov and Kuibyshev was reduced from 103,000 to 92,700 million rubles, and the planned output of crude steel in 1937 from 19 to 17 million tons. The average annual rate of growth of industry as whole was reduced from 19 to 16.5 per cent. Group B was reduced from 21.9 to 18.4 per cent, and Group A from 15.9 to 14.5 per cent.⁴¹ But the figure for investment was not changed.

³⁸ RGASPI, 59/2/16, 234.

³⁹ *XVII s"ezd* (1934), 435, 440.

⁴⁰ SV, 4, 1934, 14.

⁴¹ RGASPI, 59/2/43, 126, 129.

On the whole then, these last-minute changes were a victory for the industrial commissariats, which were given reduced production targets without a reduction in investment. This decision was obviously influenced both by the previous experience of the first five-year plan, when impossibly high targets were set, and by fear of the political damage which would result from a repetition of the failure to reach key targets. At the session Molotov no doubt reflected the view of Sovnarkom and Gosplan in praising the cuts as a manifestation of 'Bolshevik caution' – a Bolshevik virtue which had not been prominent during the first five-year plan. But at the same time he warned that the planned growth of industrial production by 16.5 per cent a year was a lower limit which 'must not be reduced by a single per cent, or by one tenth of a per cent'; in particular, the 1934 plan – 19 per cent – must be achieved in full.⁴² Molotov's warnings indicated that the party leadership continued to hope and intend that plan should be increased as soon as circumstances seemed favourable.

Following the congress, the draft five-year plan was systematically revised in order to include the changes made at the congress, which naturally influenced many aspects of the plan; but the changes were quite minor.⁴³ The final plan was sent to the press in several volumes in September and approved by a decree of TsIK and Sovnarkom on November 17, 1934.⁴⁴

It soon emerged that the figure for capital investment should have been increased rather than reduced: it was not large enough to cover all the new capacity required by the production plans (see pp. 338–40 below). It should be emphasized, however, that the five-year plan as it emerged at the congress was nevertheless set within a relatively more realistic – or less unrealistic – framework. The flights of fancy which relentlessly raised to the skies the targets of the first five-year plan were now held down. The annual rate of growth of industry was discussed within the limits of 13 and 19 per cent; no one could now propose a growth rate of 50 per cent. This was one of the main achievements of the congress in economic policy.

⁴² *XVII s"ezd* (1934), 523.

⁴³ For a comparison of the plan presented to the congress with the final version, see Zaleski (1980), 132.

⁴⁴ SZ, 1934, art. 437.

CHAPTER TWO

1934: A YEAR OF RELAXATION: THE POLITICAL BACKGROUND

Until the murder of Kirov on December 1, the year 1934 – with qualifications – continued the relative moderation and relaxation which was a prominent feature of the party congress.

With the triumph of fascism in Germany and Japan, a grave danger confronted the Soviet Union and the rest of the world. But in 1934 the immediate threat to the Soviet Union somewhat receded. In the Far East, the belligerent Japanese war minister Araki was replaced on January 22.¹ In May, Karakhan, the Soviet deputy People's Commissar for Foreign Affairs responsible for the Far East, was removed from his post and despatched to Ankara. He was traditionally hostile to Japan and an ardent supporter of Chinese communism.² This marked a further increase in the authority of Litvinov and his policy of collective security in Europe and caution in the Far East.³ During the summer the Chinese nationalist leader Chiang-Kai-shek sent his future ambassador on an exploratory trip to Moscow. The positive reaction of the Soviet side paved the way for the eventual collaboration of Chinese nationalists and communists against Japan.⁴

In Europe the signing of the Polish–German non-aggression pact in January aroused much alarm in Moscow. But Franco-Soviet relations greatly improved. Then in June Czecho-Slovakia and Romania recognised the USSR. In September the Soviet Union was accepted into the League of Nations.⁵ A moral victory over Nazi Germany had already been achieved with the collapse at the beginning of the year of the prosecution of the Bulgarian communist leader Dimitrov in the Reichstag Fire Trial. In July Germany, struggling to emerge from the depression, offered a substantial

¹ See Haslam (1992), 88–9.

² See Pons and Romano, eds (2000), 123 (S. Dullin).

³ Litvinov had been made a full member of the party central committee at the XVII congress.

⁴ See Slavinskii (1999), 42–3.

⁵ See Haslam (1984), 37–42.

credit to the USSR for the purchase of German machinery and other manufactures.⁶

Dimitrov's triumphant return to Moscow in February soon had a significant effect in Comintern. Dimitrov pressed the case against the sectarianism which had characterised international communist activities since 1928 in favour of a move towards a united front of socialists against imperialism and fascism. In July both the French and the Italian communists and socialists reached agreement for common action. By the end of the year, with Stalin's support, the united front policy had come to predominate in Comintern.⁷ And before the end of the year the French communists, previously notorious for sectarianism, had moved towards the advocacy of a 'Popular Front'. The Popular Front, unlike the United Front, included middle classes as well as workers and defended democratic freedoms against fascism.⁸ The success of Litvinov and Dimitrov had done much to break down Soviet isolation.

Within the Soviet Union, agriculture began to emerge from famine and industry developed rapidly. Against this background there were many manifestations of greater relaxation. Reversing previous austerity, the prohibition on jazz and dance music was lifted and they soon became popular in the major cities.⁹ The film *Veselye rebyata* (Jolly Fellows), the first of a series of popular musical comedies, was widely shown and publicised. This was also a time of relative tolerance in high culture. In March Shostakovich's grim new opera *Lady Macbeth of Mtsensk*, later to be savagely condemned (see p. 289 below), was favourably received. In April the British conductor Albert Coates visited Moscow and performed works by Vaughan Williams as well as classical Russian composers.¹⁰

The more relaxed atmosphere in cultural affairs was reflected in two significant gestures towards dissident writers. In May Pilnyak,

⁶ This was reported to the Politburo on July 5 (RGASPI, 17/162/15, 113–14 (art. 89/72)). The credit offered was for 200 million marks. Following strenuous negotiations, agreement in principle was reached in December 1934, subject to Germany improving the list of goods it would supply (RGASPI, 17/162/17, 42, 49, dated September 17; *ibid.* 88–89, dated December 5). The agreement was eventually signed by Schacht, German Minister of Economics, and Kandelaki, Soviet trade representative in Germany, on April 9, 1935 (DVP, xviii (1973), 280–4).

⁷ For these events see Carr (1980), 124–46.

⁸ *Ibid.* 195–201.

⁹ See, for example, *Komsomol'skaya pravda*, May 30, October 27, 1934.

¹⁰ Bullard (2000), 243–4.

author of the notorious short story about the death of Frunze, implicating Stalin for his lack of judgment or malevolence, was granted permission, together with his wife, to travel abroad for two months.¹¹ In July, the poet Mandel'shtam who had been arrested in May in connection with his bitter poem about Stalin, was released after Bukharin had appealed to Stalin. Following the release, Stalin made his famous phone call to Pasternak reporting the news, which was taken by Moscow intellectual circles as an indication of his moderation.¹²

The climax of the cultural activities of 1934 was the First All-Union Congress of Soviet Writers, which met in Moscow from August 17 to September 1, and was reported in considerable detail in *Pravda*, *Izvestiya* and other national newspapers. It was addressed by a wide range of writers and party luminaries, from Gorky to Babel and from party secretary Zhdanov to the former Trotskyist Radek and the former Rightist Bukharin. It combined political conformity with a less sectarian assessment of the prospects for literature than had previously prevailed. Behind the scenes, following an appeal by Ilya Ehrenburg to Stalin, the authorities prepared to disband the International Association of Revolutionary Writers (MORP) in favour of a broad-based organisation. This gained the support of famous writers such as Malraux, Thomas and Heinrich Mann, Dos Passos and Sherwood Anderson.¹³

The harsh treatment in 1933 of the national pretensions of the Ukrainians and others was also modified. In December 1932 the Moscow Politburo had strongly condemned 'Ukrainisation' in both Ukraine itself and in the North Caucasus.¹⁴ But a Politburo decision of January 19, 1934, resolved to transfer the Ukrainian capital from Russian-oriented Khar'kov to the old Ukrainian cultural centre of Kiev, over 400 km closer to the frontier. This move was both an implicit declaration that the Soviet Union did not believe that an

¹¹ *Schast'e* (1997), 172.

¹² See Tucker (1990), 282–6, on this event and on the atmosphere in 1934 generally.

¹³ See Ehrenburg's letter to Stalin, September 13, 1934 (SKP, 718–19). Stalin told Kaganovich on September 23 'He is right', and set out the tasks of the international association as 'a) the struggle against fascism, b) the active defence of the USSR' (SKP, 493). MORP was eventually disbanded in December 1935, by which time the new association was already extremely active. Not to be confused with MOPR, the International Union for Assistance to Revolutionary Fighters.

¹⁴ See vol. 5 of this series, pp. 190–1.

enemy could seize its territory and a concession to the Ukrainians. The Politburo decision authorising the transfer claimed that it would facilitate 'the further most rapid development of national culture and Bolshevik Ukrainisation on the basis of industrialisation and collectivisation'. This was a remarkable reversal of the decision of December 1932.¹⁵ Then in April 1934 Lyubchenko, a Ukrainian and a former *borotbist*, was appointed chair of the Ukrainian Sovnarkom.¹⁶ In the following month a draft resolution of the Ukrainian party central committee insisted that all persons employed by state and cooperative establishments in Ukraine should learn Ukrainian, and that all party members should speak in Ukrainian at meetings.¹⁷ In Belorussia, Stalin in a personal intervention complained that the 'national moment' had been underestimated in party and government work.¹⁸ In Kazakhstan, the teaching of the Kazakh language was made compulsory in Russian-speaking schools.¹⁹ To celebrate the 15th anniversary of the founding of the Kazakh republic (October 4, 1935), elaborate preparations were launched in October 1934 to prepare publications and an exhibition, and to issue a Kazakh encyclopaedia in both Kazakh and Russian.²⁰ The contrast between anti-Semitism in Nazi Germany and racial equality in the Soviet Union was emphasised by the well-publicised elevation of the small Jewish national district of Birobidzhan to the Jewish autonomous region.²¹ In the autumn a Sovnarkom decree listed 'Measures for the Economic and Cultural Development' of this region, including a significant increase in its allocation from the state budget.²²

Many, perhaps most, Soviet citizens in town and country saw some improvement in their living conditions following the great decline in

¹⁵ RGASPI, 17/3/937, 44 (art. 204/185, dated January 19, 1934).

¹⁶ RGASPI, 17/3/944, 81 (art. 133/116, dated April 28). Chubar', the previous incumbent, was transferred to Moscow as deputy chair of the USSR Sovnarkom with enthusiastic encomiums on his work in Ukraine. The *borotbisty* were a Ukrainian peasant party with an outlook similar to the Socialist Revolutionaries, and were admitted into the communist party in 1920 (see Carr (1958), 306).

¹⁷ See Martin (2001), 365.

¹⁸ See *ibid.* 364.

¹⁹ Levon Mirzoyan (2001), 69 (decree of Kazakh TsIK and Sovnarkom, dated April 14).

²⁰ *Ibid.* 77–8 (decisions of Kazakh party bureau, dated October 13 and 28). The encyclopaedia was not in fact published until the 1970s (*ibid.* 299, note 42).

²¹ SZ, 1934, art. 208 (decree of TsIK, dated May 7).

²² SZ, 1934, art. 400 (dated October 1).

the previous five years. Peasant incomes and the real wages of the employed population increased. Goods' shortages were somewhat mitigated.²³ A senior British diplomat, who had recorded the precipitate decline in consumption in his diary since his arrival in Moscow in 1930, concluded 'I think that Russia has turned the corner now ... I don't see why the Soviet government should not now become steadily more prosperous.'²⁴ In the autumn, Sidney and Beatrice Webb visited the USSR in connection with the preparation of their book *Soviet Communism – a New Civilisation?* Sidney Webb was 'extremely impressed' by the improvements since his first visit in 1932, and particularly commented on the new cooperative department store in Leningrad, which he compared with the Army and Navy Stores in London, and claimed was better than 'the most privileged cooperative shops in Britain'.²⁵

The recovery of 1934 was not confined to the economy. The number of pupils in schools increased from 22.0 million in the 1933/34 school year to 23.6 million in 1934/35.²⁶ After the substantial decline in the number of students and scientists during the 1933 crisis, by January 1, 1935, the number of students in higher education had increased to 1,156,000 as compared with 1,019,000 on January 1, 1934, and in the same period the number studying in technicums increased from 602,000 to 683,000.²⁷ On October 1, a Sovnarkom decree on school building complained that construction was lagging considerably behind the plan, and instructed Gosplan to issue additional building materials in October–December 1934.²⁸ Sovnarkom also adopted a three-year programme for an increase in the intake of doctors in training from 15,600 in 1934 to 33,600 in 1937.²⁹

These improvements particularly favoured the intelligentsia and the elite generally. Following the easing of restrictions on the social origins of those attending higher education, the number of students

²³ In Moscow clothes, boots and pots and pans, previously very difficult to obtain except in closed shops, were available in normal shops (Bullard (2000), 253, 258, 276 – diary entries for April 7 and 21 and June 18).

²⁴ Bullard (2000), 264 (diary entry for May 6).

²⁵ DVP, xvii (1971), 695 (despatch of Maisky, Soviet Ambassador to Britain, November 23, 1934).

²⁶ *Osnovnye pokazateli*, 1934, 264.

²⁷ *Osnovnye pokazateli*, 1934, 252; these numbers had not yet reached the level of January 1, 1933.

²⁸ SZ, 1934, art. 399.

²⁹ SZ, 1934, art. 348 (dated September 3).

who were manual workers or peasants by social origin declined.³⁰ Moscow restaurant life revived. Those who could afford it listened to jazz in the Metropol' or Natsional hotels, or watched gipsy singers and dancers in the Praga.³¹ Ear-marked funds were established to provide financial support for members of the Writers' and the Architects' Unions.³²

The character of 1934 cannot, however, be fully embraced by the terms 'flexibility' or 'moderation'. This was also a year of patriotic celebration of newly-acquired Soviet strength. A potential tragedy was turned into triumph when the ice-breaker *Chelyuskin*, purchased by the USSR from Denmark, was wrecked on an ice floe while endeavouring to traverse the Great Northern Sea Route. After wintering on the ice, the 73 stranded men were all rescued by Soviet aircraft. The success was celebrated by full-page accounts in the newspapers, and even by devoting a complete number of *Pravda* to the event. Stalin and four other members of the Politburo sent congratulatory telegrams to both Professor Shmidt and his colleagues from the *Chelyuskin*, and to the Soviet airmen.³³ In July, an elaborate decree expanded the functions of the Chief Administration of the Northern Sea Route to include a network of polar stations, the exploration of the prospects for industrial development of the Arctic

³⁰ Social origin of students (as percentage of total number):

		Manual workers	Collective farmers and individual peasants	Office workers and Others
Higher education:	1933	50.3	16.9	32.8
	1934	47.9	14.6	37.5
Technicums:	1933	41.5	39.8	18.7
	1934	36.9	38.8	24.3

Source: *Osnovnye pokazateli*, 1934, 265.

³¹ See Fitzpatrick (1999), 93.

³² The Litfond was established on July 28 (SZ, 1934, art. 311), and the Architects' Fund on October 5 (SZ, 1934, art. 413).

³³ See, for example, ZI, April 12, April 14, 1934. In 1996 the archives released a document written after the accident by the captain of the ship, Voronin; it claimed that the *Chelyuskin* was unsuitable for ice-breaking in those conditions, and called for greater independence for ships' captains (*Istochnik*, 1, 1996, 18–38; the document was dated October 1, 1934).

region, and the education of the minority northern peoples.³⁴ In the same month, so far without publicity, Sovnarkom took practical steps to construct in Moscow the grandiose Palace of the Soviets, to be completed by 1942 at a maximum cost of 700 million rubles.³⁵ Then in September the single-engined aircraft RD/ANT-25, designed by Tupolev and manufactured by TsAGI, and equipped with the Soviet M-34 aeroengine, acquired the first of the many Soviet world aviation records of the 1930s. It flew 12,411 km in a triangle around Khar'kov.³⁶

This was also a year in which what has been variously termed the 'conservative shift' or 'Great Retreat' to stability and traditional values was taken further. In January, two Sovnarkom decrees set out the arrangements for higher degrees and academic posts which have prevailed until the present day.³⁷ Then on May 15, following a meeting between Stalin and the principal education officials, three major decrees issued jointly by Sovnarkom and the party central committee consolidated the move away from experimentation in schools.³⁸ The first decree provided that the division of the schools into primary (classes I–IV), incomplete secondary (classes I–VII) and complete secondary (classes I–X) should be universal throughout the USSR. Pupils finishing class X were to be afforded priority in admission to higher education, and pupils finishing class VII were to be afforded priority in admission to technicums.³⁹ The second and third decrees thoroughly revised the teaching of history and geography in schools.⁴⁰ The decree on history condemned the existing practices as dominated by 'abstract sociological models', and called for 'the presentation of the most important events and facts in chronological sequence, with a description of historical personalities'. The decree stated that this factual basis was an essential prerequisite to lead pupils to a

³⁴ RGASPI, 17/3/949, 72–81 (decree of Sovnarkom and party central committee, dated July 20).

³⁵ GARF, 5446/1/476, 149 (art. 1577/274ss, dated July 4). The decision to build the Palace was first adopted in 1931.

³⁶ Chkalova (2004), 135–7; the work on the plane began at the end of 1931.

³⁷ SZ, 1934, arts. 29, 30 (dated January 13).

³⁸ Stalin, together with Kuibyshev, Kaganovich and Zhdanov, met Bubnov and Epshtein (People's Commissar of Education of the RSFSR and his deputy), and Stetsky (head of the department of culture and propaganda of the central committee) for 1½ hours on May 15. For earlier developments, see vol. 4, p. 78.

³⁹ SZ, 1934, art. 205.

⁴⁰ SZ, 1934, arts. 206 and 207.

marxist conception of history. Five commissions were established, with the task of preparing five new textbooks within a year; the commissions consisted of prominent historians who were very varied in their views and approaches. Faculties of history were to be established in Moscow and Leningrad Universities from the beginning of the academic year. All this was an implicit condemnation of the Pokrovsky school. Henceforth history taught in schools and universities was an amalgam of conventional political, cultural and economic history, placed in a dogmatic Stalinist framework. The teaching of geography was similarly criticised for 'abstract and dry presentation, lack of material on physical geography, weak training in map reading, and overloading with economic statistics and general models'.

A major dispute between Stalin and the editors of the party journal *Bol'shevik* soon made it clear that the new approach to history would involve a more positive treatment of Russian national history and traditions. The journal proposed to publish Engels' article 'The Foreign Policy of Russian Tsarism', written in 1890. In a letter to the Politburo, written on July 15, Stalin objected to the publication on the grounds that Engels exaggerated the role of Russian expansionism as leading to world war, and underestimated both the imperialist contradictions between Britain and Germany and German expansionism.⁴¹ The Politburo of course concurred.⁴² In its issue of July 31 the journal then published a letter written by Engels in 1888, and an editorial note to it.⁴³ The editorial note was angrily criticised by Stalin in a further letter to the Politburo on August 5. He claimed that by failing to recognise that Engels had made mistakes, and that Lenin had developed marxist doctrine on war further than Engels, the editors of *Bol'shevik* had acted with a 'Trotskyite-Menshevik orientation'. Stalin blamed Zinoviev for writing the editorial note, and, on Stalin's proposal, the Politburo replaced the editor of the journal and dismissed Zinoviev from the editorial board.⁴⁴ This incident not only incorporated a Russian orientation into the approved historical

⁴¹ SKP, 712–15. His memorandum about Engels was published as an article in B, 9, May 1941; for an English translation see *Labour Monthly*, August 1952 (by Brian Pearce).

⁴² RGASPI, 17/3/949, 18 (dated July 22).

⁴³ B, 13–14, 1934, 84–90.

⁴⁴ For Stalin's letter to the Politburo, and his accompanying letter to Kaganovich, both dated August 5, see SKP, 419, 716–17; for the Politburo decision, see RGASPI, 17/3/950, 31–32, 82–89 (dated August 16).

framework, but also demonstrated Stalin's right to criticise his illustrious predecessor Engels.⁴⁵

During the first six months of 1934 several significant decisions restricted the powers of the OGPU, continuing the more moderate policies associated with Akulov, who was appointed as the first Procurator of the USSR in June 1933, a position which he continued to occupy until March 1935.⁴⁶ The Politburo instructed local OGPU agencies that in future they should check exiles most carefully, 'securing satisfactory sanitary and food conditions'.⁴⁷ In a separate decision, it warned the OGPU not to question army officers and men without the knowledge and agreement of the appropriate army commissar.⁴⁸ After considering a case in which the OGPU had sentenced five alleged spies, it rescinded their sentences and ordered 'all the top personnel of the OGPU to devote attention to faults in the conduct of OGPU investigations'.⁴⁹

In these months the Politburo launched a major reform of the security services. On February 20, it decided to establish a People's Commissariat of Internal Affairs of the USSR (NKVD), which would incorporate a reorganised OGPU.⁵⁰ Two days later, in a memorandum to Stalin and Kaganovich, Akulov advocated the abolition of the local OGPU *troiki* which had the right both to try cases on any criminal matter, and to impose sentences; in a number of regions the *troiki* could impose the death penalty.⁵¹ Instead, the OGPU should

⁴⁵ The famous 'Remarks' of Stalin, Kirov and Zhdanov on the preliminary outlines of the textbooks on modern history and the history of the USSR were written a few days later, on August 8 and 9. Unlike the decree on history of May 15 and Stalin's memoranda about *Bol'shevik*, they emphasised the need to contrast the 'bourgeois French revolution' with the 'socialist soviet October revolution' in the modern history textbook, and that the history of the non-Russian nationalities should be a major feature of the textbook on USSR history, and stressed the reactionary nature of Tsarism and its dependence on the West. The Remarks were approved by the Politburo on August 14 (RGASPI, 17/3/950, art. 99–100), and published in *Pravda* on January 27, 1936).

⁴⁶ For Akulov's previous activities, including his role as first deputy chair of the OGPU between July 1931 and September 1932, see vol. 4 of this series, p. 77.

⁴⁷ RGASPI, 17/162/16, 12–16 (dated March 10).

⁴⁸ RGASPI, 17/162/16, 66 (dated May 25).

⁴⁹ RGASPI, 17/162/16, 88–89 (dated June 5).

⁵⁰ RGASPI, 17/3/939, 2.

⁵¹ See, for example, RGASPI, 17/162/15, 27 (dated August 15, 1933), granting the right to the OGPU *troiki* in Ukraine, Belorussia, the Urals, North Caucasus, the Lower Volga region, Kazakhstan and West Siberia to impose the death penalty on 'active bandits'.

merely retain the right to impose sentences of exile of 3–5 years. Akulov also proposed that all places of detention should be managed by the new NKVD, including the labour colonies of the republican People's Commissariats of Justice in which sentences of up to three years were served.⁵² Krylenko, People's Commissar of Justice for the RSFSR, advocated an even more far-reaching reform. He argued that the transfer of all places of detention to the NKVD should lead to the abolition of his own commissariat and the placing of the whole court system in the hands of the Procuracy and the Supreme Court, each acting autonomously.⁵³ His proposal to abolish the People's Commissariats of Justice was rejected.⁵⁴

The NKVD of the USSR was eventually established on July 10, 1934. The decree was approved by the Politburo, promulgated by TsIK and published in the national press on the same day.⁵⁵ Yagoda was appointed the first People's Commissar of Internal Affairs of the USSR.⁵⁶

The decree establishing the NKVD provided that all places of detention were to be placed under a chief administration of the NKVD for corrective labour camps and labour settlements. The other main function of the OGPU, investigating counter-revolutionary and anti-soviet activity, was managed by a chief administration for state security. The legal collegium and regional *troiki* of the OGPU were abolished and cases of treason, sabotage and counter-revolution were henceforth to be tried by military collegia of the normal courts. A 'Special Conference' of the NKVD was given the right to deport foreign citizens, and to exile Soviet citizens for a period up to five years. These were more limited powers than those possessed by the equivalent agency in the OGPU.⁵⁷ Krylenko unsuccessfully argued that the Procuracy should have the right to protest about the decisions of the Special Conference.⁵⁸

⁵² *Lubyanka (1922–1936)* (2003), 487–9.

⁵³ *Ibid.* 492–3 (memorandum to Stalin, Kaganovich and Molotov, dated February 27).

⁵⁴ RGASPI, 17/3/942, 2–3 (item 8 at the Politburo session of March 29).

⁵⁵ RGASPI, 17/3/948, 33, 92–93; SZ, 1934, art. 283.

⁵⁶ Menzhinsky died on May 10, 1934.

⁵⁷ The other main divisions of the NKVD managed the militia (civil police); frontier and internal security; the fire service; and the registration of citizens. The Statute of the Special Conference was approved on November 5 (SZ, 1935, art. 84).

⁵⁸ *Lubyanka (1922–1936)* (2003), 548–9 (memorandum to Kaganovich, dated August 3).

On the same day on which it established the NKVD, the Politburo adopted a series of measures which simultaneously instituted the arrangements for trying cases of treason, sabotage and counter-revolution by special (military) collegia of the normal courts, and provided for improved training and remuneration for court officials.⁵⁹

These measures were generally welcomed as a major improvement. *Izvestiya*, now edited by Bukharin, boldly declared that the establishment of the NKVD 'means that the enemies within the country have in the main been defeated and smashed ...; it means that the role of revolutionary legality and of precise rules fixed by the courts will increase to a tremendous extent'.⁶⁰ Kaganovich authoritatively stated that 'as we are in more normal times we can punish [class enemies] through the courts and not resort to extra-judicial repression'.⁶¹

In practice, a policy of greater leniency had already begun to prevail in 1933. The attempt of Yagoda to establish new special settlements containing as many as two million people had failed miserably, with considerable suffering.⁶² The gross number of new special settlers in 1933 amounted to only 268,000, and as a result of deaths, escapes and transfer of some settlers to camps the total net number of special settlers declined by 70,000, falling from 1,142,084 to 1,072,546.⁶³ In 1934, the net number of special settlers declined still further. With the end of the famine the deaths in the settlements had declined from 152,601 in 1933 to 40,012 in 1934: but by January 1, 1935, the net number of settlers had fallen by about 100,000 to 973,693; it was less than one million for the first time since 1930.⁶⁴

The number of people arrested by the security services (OGPU/NKVD) amounted to 505,256 in 1933 and the equivalent number of arrests by the NKVD in 1934 was considerably smaller – 205,173. The number of persons sentenced as a result of cases handled by the NKVD/OGPU also declined substantially in 1934, from 264,994 in 1933 to 113,629 in 1934. The number of death sentences fell slightly, from 2,154 to 2,056.⁶⁵ The total number of people sentenced to

⁵⁹ Resolution 'On the Court and the Procuracy', RGASPI, 17/3/948, 94–98; for details, see Solomon (1996), 166–7.

⁶⁰ I, July 10, 1934.

⁶¹ Cited in Solomon (1996), 166.

⁶² See vol. 5 of this series, p. 224, and for more detail ch. 2 of Khlevniuk (2004).

⁶³ See Khlevniuk (2004), 68.

⁶⁴ See Table 24, and SI, 11, 1990 (Zemskov).

⁶⁵ OA, 2, 1992, 28 (V. P. Popov).

deprivation of freedom by the civil courts declined from 414,862 in 1933 to 284,880 in 1934 (RSFSR only).

There was also a sharp improvement in conditions in camps and colonies as well as in the special settlements. In camps the number of deaths declined from 67,300 in the famine year 1933 (15.7 per cent of the annual average number of prisoners) to 26,300 in 1934 (4.2 per cent of all prisoners).⁶⁶

The status of some former kulaks was significantly improved. In March 1934, in response to a request from a region, the Politburo resolved that there was no objection to accepting former kulaks into the kolkhozy if they had returned from exile with a positive recommendation.⁶⁷ Then on May 27 TsIK ruled that, provided that they worked conscientiously and were 'loyal to the measures of Soviet power', former kulaks, on the proposal of OGPU plenipotentiaries, could be restored to civil rights after five years, or after three years if they were working in the gold and platinum industry. Moreover, shock workers, particularly young workers, could acquire civil rights ahead of time.⁶⁸

The reduction in the number of sentences for counter-revolutionary offences did not, however, lead to a decline in the total number of prisoners in the forced labour system. While the number of prisoners in camps who had been sentenced for counter-revolutionary offences declined in 1934 by 16.9 per cent, the total camp population increased by 215,500, from 510,000 on January 1, 1934, to 725,500 on January 1, 1935. Moreover, this net increase did not represent the total number of persons newly sent to camps in 1934, which amounted to some 428,000.⁶⁹ This was the largest increase in the camp population in any year in the 1930s except 1938.⁷⁰ Of the

⁶⁶ SI, 6, 1991, 14 (Zemskov); nevertheless, the percentage of deaths was still higher than in 1931 (3.6 per cent).

⁶⁷ RGASPI, 17/162/16, 6 (dated March 3).

⁶⁸ SZ, 1934, art. 257. For a later modification of this decision, see p. 283 below.

⁶⁹ SI, 6, 1991, 11, 14 (Zemskov). During 1934, 147,300 persons were released from camps, 36,700 escaped and were not recaptured, and 26,300 died, a total of 213,300 (see SI, 6, 1991, 14 (Zemskov)), which added to 215,500 gives 428,800.

⁷⁰ Apparently the increase in the other sectors of the penal system was not substantial, if it occurred at all in 1934. As we have seen, the number of special settlers declined. The number of prisoners in the colonies of the People's Commissariats of Justice amounted to 'up to 400,000' in March 1934 (memorandum by Krylenko, dated March 17 (*Lubyanka (1922-1936)*(2003), 508-9). According to the TsIK and Sovnarkom decree of October 27, and the NKVD order of October 29, 1934, all prisoners in these colonies were to be transferred to the NKVD by December 1.

net increase of 215,500, 75.6 per cent of the total were sentenced during 1934 in four main categories: crimes relating to property; crimes of office and economic crimes; theft of socialist property; and belonging to the 'socially harmful or socially dangerous element'.⁷¹ These large increases resulted from the determination of the authorities to impose social order on the substantial section of the population whose lives had been disrupted by dekulakisation and famine, and by the introduction of the passport system in most towns. In the Russian republic alone, 385,000 people had been refused passports by August 1934.⁷²

At the XVII party congress prominent former oppositionists had declared their loyalty to Stalin's policies (see pp. 7–9 above). Following the congress, a number of them were brought back into public life. On February 20, Bukharin was appointed editor of the government newspaper *Izvestiya*. Shortly afterwards its size was increased, and it was authorised to appoint foreign correspondents in Washington, Tokyo and Warsaw.⁷³ Bukharin immediately embarked on the publication of a large number of lively and wide-ranging articles which, while enthusiastically supporting the regime, also sought to widen its flexibility, and the limits of discussion. Bukharin's former right-wing associate Uglanov was readmitted into the party.⁷⁴ The Politburo also recommended the party control commission to consider the readmission to the party of the prominent former Trotskyist Rakovsky, following the publication of his renunciation of his past views in *Pravda*.⁷⁵ Zinoviev and Kamenev were appointed to official posts (though, as we have seen, Zinoviev soon fell into disfavour). In July P. G. Petrovsky, son of the Ukrainian president, who had been arrested in connection with the Ryutin affair, was freed from imprisonment following his public avowal of error.⁷⁶

(SZ, 1934, art. 421; ISG, ii (2004), 113–14). In fact, however, the number of prisoners in NKVD colonies amounted to only 240,000 on January 1, 1935 (SI, 6, 1991, 11 (Zemskov)).

⁷¹ OI, 4, 1997, 65 (Zemskov).

⁷² *Cahiers*, lxii (2001), 520 (Shearer).

⁷³ RGASPI, 17/3/939, 2; 17/3/940, 24 (dated March 2).

⁷⁴ RGASPI, 17/3/941, 20 (dated March 13).

⁷⁵ For the negotiations with Rakovsky, see RGASPI, 17/3/941, 20 (dated March 13), 40 (dated March 18), P, April 14, 1934, and RGASPI, 17/3/944, 17 (dated April 22). He was eventually readmitted eighteen months later on November 13, 1935.

⁷⁶ RGASPI, 17/3/449, 18 (dated July 22).

In June the former Trotskyist Pyatakov, who had returned to the official fold in 1929, was appointed to the key post of first deputy commissar for heavy industry.⁷⁷ This consolidated the dominance in Narkomtyazhprom of the talented and thrusting officials who had been advanced and encouraged by Ordzhonikidze in the previous four years. In the economy more widely, reorganisation of the commissariats and the reshuffling of leading officials brought forward several talented leaders in planning, finance and trade. On April 4, Mar'yasin was appointed head of the State Bank (Gosbank); he soon proved to be independently-minded and bursting with ideas for the improvement of the financial system.⁷⁸ On May 25, following the resignation of Kuibyshev, Mezhlauk, an experienced, competent and broadminded administrator, was appointed head of Gosplan in his place.⁷⁹ Then on July 29, 1934, Veitser was appointed People's Commissar of Internal Trade, following the division of Narkomsnab into Narkomvnutorg, responsible for internal trade, and Narkomishcheprom, responsible for the food industry. As head of Narkomvnutorg he combined energetic visits to local organisations with enthusiasm for consumer-oriented trade and for market arrangements within the state system.⁸⁰ The equally energetic and more

⁷⁷ SZ, 1934, ii, art. 132 (dated June 10).

⁷⁸ SZ, 1934, ii, art. 54. He replaced Kalmanovich, who was appointed People's Commissar for Grain and Livestock State Farms. L. E. Mar'yasin (1894–1938) was born in Mogilev, attended a gymnasium before the revolution, and joined the party in 1915. He served in party posts during the civil war; in 1923–24 he was head of the department of trade and financial policy of Vesenkha, and in 1925–27 worked in the party apparatus, first in the Ukrainian raspredotdel and then, with Yezhov as deputy head of the USSR orgraspredotdel. In 1930 he graduated from the party Institute of Red Professors, and joined the board of Gosbank, becoming a deputy head on February 4, 1932.

⁷⁹ SZ, 1934, ii, art. 83. V. I. Mezhlauk (1892–1938) was born in Khar'kov; his father was a teacher from a gentry family. Mezhlauk graduated in history, philology and law at Khar'kov university before the revolution. A Menshevik before 1917, he joined the Bolsheviks in July 1917, served in the Red Army, and briefly became People's Commissar for War in Ukraine in 1919. In the 1920s he worked in Narkomput', and then occupied various positions, including head of Glavmetall, in Vesenkha until he was appointed first deputy chair of Gosplan in 1931. He was famous in party circles for his unpublished cartoons of party leaders, often drawn at Politburo meetings.

⁸⁰ SZ, 1934, ii, art. 145. I. Ya. Veitser (1889–1938), born in Vilna, a member of the Jewish Bund before the revolution, attended the Juridical Faculty of Kazan' University, and worked as a tutor and accountant. He joined the Bolsheviks in 1914, and after the revolution served in various local economic posts in Chernigov, Vyatka,

politically influential Mikoyan took over Narkompishcheprom. On April 10, I. M. Kleiner (1893–1937), who had been a very influential second in command in Komzag, was appointed its head when Chernov took over Narkomzem.⁸¹ In his memoirs Mikoyan, the only member of this group to survive the purges, compensating for his failure to save any of them from execution, described Veitser as ‘an extremely creative (*initsiativnyi*) and efficient leader’, and Kleiner and Chernov as ‘entirely worthy and well-trained people’.⁸² He also characterised Grin’ko, People’s Commissar for Finance, as ‘an intelligent and well-trained person, who had a good mastery of the issues relating to his commissariat’.⁸³

One leading Bolshevik administrator was less fortunate at this time than Bukharin and the others. A. M. Markevich, pioneer of the Machine-Tractor Stations and first head of Traktorotsentr, had been sentenced to imprisonment in a labour camp in March 1933, when a large number of prominent agricultural officials were sentenced to death for ‘counter-revolutionary wrecking’.⁸⁴ His case was reconsidered by a commission of the Politburo established on September 15, 1934.⁸⁵ Stalin strongly supported this move. A draft resolution from the commission criticised ‘the illegal methods of investigation’, and called for a re-examination of the case. These proceedings had not been completed by the time of Kirov’s murder, and Markevich was not released.⁸⁶

Penza and Tula. In 1924 he was appointed a member of the collegium of Narkomtorg, and served there until 1929, when he was appointed Ukrainian People’s Commissar of Internal Trade. In 1930 he was transferred to the newly-established Narkomvneshtorg, and was appointed Soviet trade representative in Germany in 1931. An ascetic man, he was married to Natalya Sats, niece of Lunacharsky’s actress wife, and director of the Moscow children’s theatre. For Veitser’s activities in Narkomtorg see also Hessler (2004), ch. 5.

⁸¹ SZ, 1934, ii, art. 99. For Kleiner’s previous activities see the index to vol. 5. Kleiner, a former anarchist, was exiled to Siberia in 1910 and then served in the army and worked in a tobacco factory. He joined the Bolsheviks in 1920, and occupied various posts concerned with trade until his appointment to Komzag in 1932.

⁸² Mikoyan (1999), 295.

⁸³ *Ibid.* 520.

⁸⁴ See vol. 4, p. 337 and vol. 5, pp. 355–6. For Markevich see the numerous references in the index to vol. 2.

⁸⁵ RGASPI, 17/162/17, 42; the commission consisted of Kuibyshev (chair), Kaganovich and Akulov; Zhdanov was later added (*ibid.* 67, dated October 4).

⁸⁶ For further details see Khlevnyuk (1996), 130–3. Stalin brusquely wrote on a further appeal from Markevich ‘Return to the camp’.

Ordzhonikidze, in a speech at Uralmashzavod on August 24, 1934, emphasised the need for a more positive attitude to the 'bourgeois specialists'. He referred dismissively to a recent case of arson in the factory, conceding somewhat ambiguously that 'we must believe' the confessions of the engineers concerned, but also declaring 'I think, comrades, that this trial and this group of people will be the last group in our factory':

There must be no talk that our engineers, with whom we built our factories, have begun to vacillate, that some of them have doubts.⁸⁷

The drive for social order began to include the imposition of conventional sexual morality. At this time stories about homosexual practices were widespread in Moscow.⁸⁸ On March 7, 1934, a Sovnarkom decree imposed a sentence of 3–5 years on those found guilty of 'homosexual relations'; the sentence was increased to 5–8 years if the person accused used force or took advantage of the position of dependence of his partner.⁸⁹ In August Florinsky, head of the protocol department of Narkomindel, was accused by the OGPU of being both an active homosexual and a spy, neatly combining a political and a moral offence, and he was arrested on the order of the Politburo, with Stalin's explicit support.⁹⁰

Several significant measures adopted in the course of 1934 – well before the murder of Kirov – ran counter to the apparent moderation of the reform of the OGPU. These could partly be explained by the generally threatening international situation. On March 29, on Stalin's proposal, the Politburo established a commission chaired by Zhdanov with the task of preparing 'practical measures fully protecting our armaments factories from penetration by undesirable elements'.⁹¹ On May 4, it approved a list of 68 factories where special 'hiring departments (*otdely naima*)' were to be headed by selected

⁸⁷ RGAE, 7297/38/113, 2–3.

⁸⁸ See Bullard (2000), 225, 234.

⁸⁹ SZ, 1934, art. 110.

⁹⁰ See Maksimenkov (1997), 205–6. The Politburo resolution called for the removal of Florinsky and checking all the staff of the commissariat (RGASPI, 17/3/949, 24). This was followed by a letter from Stalin to Kaganovich of August 4 complaining about the delay in the arrest, and by ciphers and a letter of reply from Kaganovich of August 4 and 5 (SKP, 416, 417, 421).

⁹¹ RGASPI, 17/162/16, 25 (item 6).

OGPU officials.⁹² A few weeks later the Politburo reprimanded the aviation industry for the 'irresponsible' issue of passes to enter aircraft factories.⁹³ This was an important stage in the establishment of a tight security cordon around the armaments' industries, which maintained a high degree of secrecy throughout the Soviet period.

The Politburo also set up a high-level commission to sanction business journeys abroad. Requests were to be checked for both the 'political trustworthiness' of the applicants and for 'business expediency'.⁹⁴ Then, on a proposal from Voroshilov, new clauses were included in the Statute on State Crimes imposing severe punishments on servicemen who fled abroad, and on their families. If members of the family assisted the betrayal or knew about it they were to be sentenced to 5–10 years deprivation of liberty, and their property was to be confiscated. Moreover, all adult members of the family who had been living with the serviceman or maintained by him were to be deprived of electoral rights and exiled to 'distant areas of Siberia' for five years. The same new clauses imposed the death penalty (or ten years' imprisonment in mitigating circumstances) for revealing state secrets as well as for espionage.⁹⁵ The decree, with its sinister threat to punish innocent family members, was drawn to general attention by publishing it in the press.

In practice, during 1934 the Politburo authorised the death sentence for alleged spying on several occasions, and the Supreme Court was provided with finance to construct a building in which death sentences could be carried out.⁹⁶ The boundary between spying and dissidence, always flexible, moved appreciably during the year. The death penalty was imposed not only on alleged

⁹² RGASPI, 17/162/16, 45, 51–54 (item 2). Elaborate details of these arrangements were approved on May 26 (RGASPI, 17/3/945, 3, 61–72).

⁹³ RGASPI, 17/3/948, 28 (dated July 8).

⁹⁴ RGASPI, 17/3//945, 10 (dated May 7).

⁹⁵ RGASPI, 17/3/946, 29; SZ, 1934, art. 255 (decree of TsIK, dated June 6). For preceding Politburo decisions on this question, see RGASPI, 17/3/941, 1 (dated March 20; item 1); 17/3/944, 3–4 (dated May 4, item 11); 17/3/945, 5 (dated May 26, item 14).

⁹⁶ See, for example, RGASPI, 17/162/16, 86 (dated May 31), the case of members of the Polish Liberation Army, and 17/162/17, 32 (dated September 2), the case of Japanese spies in the Stalinsk iron and steel works in West Siberia. For the allocation of 80,000 rubles to the Supreme Court, see RGASPI, 17/162/16, 45 (dated April 17).

members of the Polish Liberation Army but also on alleged provocateurs in the Polish Communist Party. In August, Stalin personally indicated that dissidence involved treachery. Nakhaev, chief of staff of the artillery division of Osoaviakhim (the Society for Air and Chemical Defence) attempted – entirely unsuccessfully – to organise an uprising in Moscow. Nakhaev was a sick isolated 30-year old who was preparing to commit suicide, and Voroshilov, no doubt correctly, concluded that ‘he was a psychopath’. But Stalin announced to Kaganovich that Nakhaev was a ‘Polish-German or Japanese spy’, working for an organisation, and insisted on the concoction of a case along these lines against Nakhaev and his alleged co-conspirators.⁹⁷

The application of the death penalty was not confined to cases of alleged treachery. In April the Politburo approved the execution of three members of railway staff following a train crash.⁹⁸ In the autumn, Kuibyshev visited Central Asia to support the campaign to collect raw cotton, and special local commissions were authorised to impose the death penalty for sabotage of the campaign.⁹⁹

Moreover, the more flexible national policy generally characteristic of 1934 was not consistently applied. In August 1934 Stalin wrote to Kaganovich:

it seems to me that the time has come to eliminate the Central Asian Bureau, thus connecting Turkmenia, Uzbekistan and Tadzhikia directly with Moscow ... It will be better without the barrier.¹⁰⁰

On November 16 a Sovnarkom decree accordingly abolished the Central Asian Economic Council, and the plenipotentiaries from the USSR People’s Commissariats attached to it, and also abolished

⁹⁷ For details see SKP, 411–12, and Rees, ed. (2004), 127–8 (Davies, Ilić and Khlevnyuk). Nothing was known about this case until the opening of the archives in the mid-1990s.

⁹⁸ RGASPI, 17/162/16, 36 (dated April 8).

⁹⁹ RGASPI, 17/162/17, 80 (dated November 9); 17/162/17, 86, 87 (dated November 26). Outside the cotton area, in West Siberia, where disturbances were frequent, a commission including the party secretary Eikhe was also authorised to impose the death penalty (RGASPI, 17/162/17, 43 (dated September 19); 17/162/17, 74 (dated November 4)).

¹⁰⁰ SKP, 460–1. Stalin justified this move on the grounds that the Central Asian republics, unlike the Transcaucasian republics, were not combined into a federation. But two years later the Transcaucasian Federation was also abolished.

the various industrial and administrative agencies responsible for Central Asia as a whole.¹⁰¹ This was a major step towards the centralisation of control over these national republics.

The year was not free of efforts to constrain the more independently-minded. In March and April *Pravda* published articles and correspondents' reports criticising TsUNKhU. TsUNKhU was headed by the independently-minded V. V. Osinsky. According to *Pravda*, TsUNKhU had underestimated the number of livestock. An editorial article on March 29 claimed that the 'lower apparatus for national records ... to the extent of its power and ability is engaged in wrecking'. It added that TsUNKhU itself was rubber stamping this 'wrecking collection of figures'. Mekhlis, the editor of *Pravda*, later stated that he had personally written this editorial and two further articles. In preparation he had consulted relevant staff in the Moscow and Russian republic sections of TsUNKhU, Narkomzem officials, and Voznesensky, who had been investigating the livestock records and population statistics on behalf of the party and soviet control commissions.¹⁰² On April 15 the Politburo established a commission, headed by Kuibyshev, and including both Mekhlis and Osinsky, to examine the matter, and also agreed that Osinsky should publish a rebuttal in *Pravda*, to be followed the next day by an editorial reply. These appeared on April 22 and 23, followed by a further rebuttal and editorial reply on April 26 and 27. The editorial of April 27, entitled 'Comrade Osinsky Exposes Himself', condemned him as a 'conceited grandee', who had a 'non-party attitude to local organisations' and blamed him for the 'bourgeois tendencies in the TsUNKhU apparatus'. The criticisms by *Pravda* and its correspondents were specific and detailed, but seem to have had little substance. On April 27, the day on which the editorial appeared, Osinsky indignantly telephoned Stalin, and wrote letters to both Stalin and Kuibyshev. He pointed out that the failure to publish a further refutation in *Pravda* would mean that 'the general public will be convinced that Mekhlis is writing on the instructions of the central committee'.¹⁰³ The furore had no immediate sequel. On May 4

¹⁰¹ SZ, 1934, art. 241.

¹⁰² GARE, 5446/27/50, 65–66 (letter from Mekhlis to the Politburo, dated April 27), published in *Sovetskoe rukovodstvo* (1999), 274–5. In 1939 Voznesensky was appointed head of Gosplan.

¹⁰³ GARE, 5446/27/60, 33 (to Stalin), 31–32 (to Kuibyshev), published in *Sovetskoe rukovodstvo* (1999), 272–4.

the Politburo postponed its discussion of the report of the Kuibyshev commission, and on the following day granted Osinsky two months' leave on medical grounds.¹⁰⁴

In the following month a clash between Stalin and Bukharin confirmed that even in this time of relative moderation there were strict limits on what could be published. On May 12, Bukharin published an article in *Izvestiya* in which he presented an account of Soviet industrialisation which combined enthusiasm with much greater frankness than had so far been permitted. The key passage read:

The conscious force in [the proletarian revolution], the party, relying on the heroic enthusiasm and self-assertiveness (*samoutverzhdenost'*) of the proletariat, concentrated all economic resources on the heavy industry sector. By intensifying and organising labour, by extreme economy, by direct and indirect taxes, by voluntary payments, by loans, by the corresponding price policy, and so on, a very firm direction was taken towards the self-assertive construction of heavy industry. The percentage of accumulation in the national income was extremely high (leading to very great 'tension'), the redistribution of the forces of production took place partly at the expense of the other sectors of the economy (including agriculture) and the relationship between production and consumption moved towards the decisive predominance of the former.

In another passage Bukharin also asserted that 'the individual peasant sector and the personal economy of the collective farmer must not in any circumstances be neglected'.

On May 13, the day after Bukharin's article was published, A. I. Stetsky, head of the propaganda and agitation department of the central committee, sent a very critical memorandum about it to Stalin, Kaganovich and Zhdanov. This was followed by further exchanges between Bukharin and Stetsky, and eventually on July 14 Stalin sent all this material to the Politburo, commenting 'Cde. Stetsky is right, not Bukharin.' In his accompanying memorandum Stalin criticised Bukharin for several infelicities in his expression of marxist doctrine. But the main thrust of his criticism was that 'it is wrong to give even a distant hint that our heavy industry developed by a definite or partial devouring of light industry and agriculture' – 'there is

¹⁰⁴ RGASPI, 17/3/945, 7, 28. The livestock census in June–July 1935 was mainly handled by Narkomfin (SZ, 1935, art. 231, dated May 17, 1935).

undoubtedly such a hint, though a distant one, in Bukharin's article'.¹⁰⁵ This was a relative mild presentation of Bukharin's rather forthright statement. No administrative measures against Bukharin followed, and Bukharin continued to write prolifically in *Izvestiya*. For the moment, moderation prevailed.

A few months later, Stalin himself acknowledged that Soviet industrialisation had involved 'costs and extra expenditure, the breaking of machines and other losses', but claimed that 'we have been able in 3 or 4 years, roughly and in the main, to achieve what was accomplished in Europe in the course of decades'.¹⁰⁶ In a similar spirit, Ordzhonikidze, in a speech at Uralmash on August 29, acknowledged the past sacrifices made to achieve the present rapid growth in the production of iron:

we are obtaining this with imported equipment ... no-one gave it for nothing, we had little gold, and we had to take from ourselves a piece of bread, a piece of meat, and export to pay the capitalists.¹⁰⁷

On July 29, Stalin met the famous British writer and publicist H. G. Wells, and the interview between them lasted three hours. The text was approved by both Wells and Stalin, and published by the British journal *New Statesman and Nation* and in *Bol'shevik*. Wells argued that the United States under Roosevelt, whom he had also recently interviewed, was creating a 'planned, that is socialist economy', and thus fundamentally was coming to resemble the Soviet Union. According to Wells, it was essential if socialism was to be established that the organisers of the economy and the skilled technical intelligentsia should be converted to socialist principles of organisation. Stalin disagreed. He praised Roosevelt for his

¹⁰⁵ RGASPI, 558/11/1118, 37–39. Stalin's memorandum is published in TSD, iv (2002), 200–1, and in *Sovetskoe rukovodstvo* (1999), 293–5. The latter source also published memoranda from Bukharin, Stetsky and Mekhlis to Stalin and others (pp. 277–9, 282–92). Stalin also argued rather pedantically that Bukharin was wrong to state that industrialisation required the development of fixed capital in general; the essence of the matter was the capital of heavy industry. Bukharin was also wrong to treat collectivisation as a mere 'agrarian revolution', because collectivisation was superior to any other agrarian policies. And it was an error to distinguish a separate 'classical' phase in NEP, 'based on the market'.

¹⁰⁶ P, December 29, 1934 (address of December 26); for other aspects of this speech, see p. 75 below.

¹⁰⁷ RGAE, 7297/38/93, 2.

‘initiative, courage and determination’, but argued forcefully and with some sophistication that ‘Roosevelt will not attain the goal you mention, if indeed that is his goal’. This was because the banks and the industries were all owned by private owners, and skilled workers and engineers were working for them. In a conciliatory passage, he conceded that ‘perhaps, in the course of several generations, it will be possible to approach this goal somewhat; but I personally think that even this is not very probable’. Reforms were ‘concessions in order to preserve class rule’. Instead, only the working class and political power could overcome the resistance of the ruling class and establish a new revolutionary order. Communists ‘would be very pleased to drop violent methods if the ruling class agreed to give way to the working class. But the experience of history speaks against such an assumption.’ Communists must therefore ‘call upon the working class to be vigilant, to prepare for battle’.¹⁰⁸

The image of Stalin presented in the interview was that of a thoughtful statesman, concerned to persuade Wells by rational argument that his world view was mistaken.

The murder of Kirov on December 1 by Nikolaev launched a tragic chapter in the history of Soviet repression. Some Soviet investigators and historians insist that the murder was instigated by Stalin. Others claim that the murder was the act of Nikolaev, a disillusioned individual, or perhaps a jealous husband, and that it led the vicious and paranoid side of Stalin’s character to predominate.¹⁰⁹ A careful Western historian writes in his monograph on the assassination and its consequences that ‘My conclusion is that Nikolaev very probably acted on his own.’¹¹⁰

Immediately following the murder, a decree of TsIK announced savage ‘procedural changes’ in the investigation of terrorist organisations and of acts against Soviet officials. An investigation was to be completed in ten days. The accused was to be given the indictment within one day of the court sitting. The case was to be heard without

¹⁰⁸ For the Russian text see *Soch.*, xiv (1997), 24–39. For the English text, see *H. G. Wells’ Interview with Stalin* (1950).

¹⁰⁹ For the former view, see A. N. Yakovlev’s memorandum of March 27, 1990; for the latter view, see the memorandum from officials of the USSR Procuracy and the investigation department of the KGB, dated June 14, 1990 (*Reabilitatsiya*, iii (2004), 325–33, 459–507).

¹¹⁰ Lenoe (2010), 689.

the participation of the adversary side. No appeals or petitions on sentences should be heard. The death sentence was to be carried out immediately after the sentence was pronounced.¹¹¹ Stalin insisted to the investigators that the Zinovievites were responsible for the murder.¹¹² Before the end of the year 14 members of an 'underground Zinovievite organisation', including Nikolaev, had been executed. Many more were to follow.

¹¹¹ SZ, 1934, 459. The decree was dated December 1, but it was not placed before the Politburo (by poll) until December 3 (RGASPI, 17/162/17, 87). It was published in *Pravda* and other national newspapers on December 5. An earlier version appeared in *Pravda* on December 4.

¹¹² *Reabilitatsiya*, iii (2004), 481.

CHAPTER THREE

THE ECONOMY IN 1934

(A) THE 1934 PLAN

In Chapter 1 we saw that after much discussion in the course of 1933 the second five-year plan, approved at the XVII party congress, included an investment figure which assumed that the average annual investment during the last four years of the plan would be over 50 per cent greater than actual investment in 1933.¹ This implied a very substantial increase of investment in 1934, but it would nevertheless have been too small to contain the ambitions of key sectors of the economy. The discussions of the plan for 1934 which took place in 1933 simultaneously with the discussions about the five-year plan were strongly influenced by pressure from key sectors of the economy, particularly the army and the armaments industries. Their expenditure had been severely restricted in 1933, a year of economic crisis – it had even been reduced as compared with 1932. In June 1933, a commission headed by Ordzhonikidze, cutting across the discussions about the five-year plan, concluded that it was essential to expand the capacity of the armaments industries very considerably. Investment in these industries in 1933 amounted to 604 million rubles. The commission proposed that it should amount to as much as 3,650 million rubles in the two years 1934–35. This enormous figure excluded investment for defence purposes in the civilian sectors of the economy. According to the commission, the bulk of this total must be concentrated in the single year 1934. The defence sector of Gosplan reduced the 1934–35 claim to 2,250 million, of which 1,400 million would be invested in 1934, and itself proposed a much lower figure than this.² Curiously, all these drafts revived the ‘attenuating curve’ of investment,

¹ The amount approved was 133,000 million rubles; with an investment of 18,000 million in 1933; this left 115,000 million for the remaining four years, or 28,800 million a year.

² For the Gosplan record of these developments, see RGAE, 4372/91/1455, 43–41 (dated August 14, 1933), and 19–16ob (dated August 16); both these documents are handwritten. For the figures, see n. 14 below.

notorious in the discussions about the first five-year plan in the 1920s.³ Meanwhile, the organisations responsible for different types of armament had prepared their own draft investment plans for 1934. Even after these claims were reduced by the chief military-mobilisation administration of Narkomtyazhprom, they still amounted to 2,034 million rubles, plus 461 million in civilian industry.⁴ This temporarily revived the over-optimistic planning characteristic of 1929–31.

Other government departments presented their own less ambitious but still substantial claims for 1934 at this time. However, in September 1933 Gosplan proposed that total investment in 1934 should amount to a moderate 21,000 million rubles, 17 per cent greater than the investment actually achieved in 1933, and that industrial production should increase by a relatively modest 15 per cent. Kuibyshev, as head of Gosplan, forwarded the proposal to Molotov, who agreed with it and forwarded it to Stalin, on leave in Sochi.⁵ Stalin approved these figures on the same day, writing to Molotov 'I agree.'⁶ Gosplan now proceeded to cut back the departmental claims. However, as a result of further pressure from the commissariats, the investment plan was increased for both the five-year plan and the 1934 plan. The plan for 1934, approved by Sovnarkom on December 31, was increased to 25,111 million rubles, nearly 40 per cent greater than investment in 1933. The attenuating curve for the second five-year plan as a whole was still retained: the 1934 figure was the largest annual increase.⁷ A published Gosplan report drew attention to the fact that, following the concentration on heavy industry during the first five-year plan, in 1934 for the first time investment was planned to grow more rapidly

³ For example, in an estimate for the aircraft industry, investment was to decline from 340 million in 1934 to 118 million in 1937 as compared with 216 million in 1933 (RGAE, 4372/91/1455, 17ob). For the attenuating curve, see Carr and Davies (1969), 847–8.

⁴ RGAE, 7297/41/183, 20–19 (dated August 4, 1933); in the artillery and small arms industries, for example, the claim was reduced from 975 to 760 million (*ibid.* 2–1).

⁵ RGASPI, 79/1/798, 4 (Molotov letter to Kuibyshev, dated September 12).

⁶ *Pis'ma* (1996), 248–9.

⁷ SZ, 1934, art. 13. The other main planning document for 1934, the unified state budget, was approved on January 4, 1934, by a session of TsIK (SZ, 1934, art. 14). For the annual figures for 1934–37, see *Vtornoi* (1934), i, 717. The only other year for which a substantial rate of growth was planned was 1937, the last year of the plan.

in the Group B industries, and in agriculture and transport, than in heavy industry.⁸

It was clear to those responsible for implementing the 1934 plan that many of the specific projects included in the five-year plan could not be fitted in to the investment allocations. The investment plan was extremely tight in every industry. The head of Glavmetall, A. I. Gurevich, wrote to Ordzhonikidze on November 30, 1933:

I am in great difficulty about how to allocate the capital investment plan – because money is insufficient for everything which is absolutely necessary ... When I proposed more than 2,300 [million rubles] you swore at me.⁹

The final allocation to the metals industry was only 1,627 million rubles.¹⁰ Similarly, Kaminsky, People's Commissar for Health, commented when he submitted the health plan for the following year that the 1934 investment allocation had been 'completely insufficient'.¹¹ The chair of the soviet executive committee of the Ivanovo region complained that the crucial rubber and asbestos plant in Yaroslavl' was working at only 6 per cent of its capacity, and urgently needed a larger investment grant if it was to produce motor tyres as scheduled.¹² Gosplan of the Belorussian republic complained not only about the size of its grant but also about the procedures followed by Gosplan of the USSR. It claimed that these had forced the allocation into fixed limits, removing factories essential to its plan.¹³

Two civilian sectors were particularly favoured. As compared with the average increase of 39.5 per cent, investment was planned to increase by 176 per cent in light industry, greatly neglected in previous years, and by 71 per cent for the railways, a persistent bottleneck.

Defence investment and expenditure was the most contentious issue. Investment in Narkomtyazhprom, of which the armaments

⁸ PKh, 5, 1934, 29 (G. Smirnov), 25.

⁹ *Sovetskoe rukovodstvo* (1999), 264–5.

¹⁰ *Narodno-khozyaistvennyi plan 1935* (1935), 468.

¹¹ RGVA, 33987/3/633, 248 (undated memorandum to Stalin, Molotov and Voroshilov, evidently written at the end of 1934).

¹² RGAE, 4372/32/25, 153–152 (memorandum to Kuibyshev, dated December 16, 1933).

¹³ RGAE, 4372/32/25, 282–280 (memorandum from Golendo to Mezhlauk, evidently written at the end of 1933). For other examples, see the series of documents in RGAE, 4372/32/35.

industries formed a part, was planned to increase relatively slowly (+22 per cent). Within Narkomtyazhprom the grant for investment in the armaments industries amounted to 874 million rubles, as compared with 604 million in 1933, an above-average increase (+45 per cent), but a far cry from the proposals of the Ordzhonikidze commission.¹⁴ At the same time the army, supported by Narkomtyazhprom, proposed to increase its order for weapons and other military equipment very substantially. On November 19, 1933, the Politburo instructed Voroshilov and Ordzhonikidze to prepare two variants of the plan for military orders; one for 2,000 million rubles, the other 'larger than' 2,000 million rubles.¹⁵ Eventually military orders were fixed at 2,494 million rubles, and the total defence appropriation from the budget at 5,800 million rubles, an increase of 35 per cent on actual expenditure in 1933.¹⁶ Thus expenditure on the armed forces, like investment in the armaments industries, was planned to increase substantially, but much less rapidly than the defence commissariat had proposed.

¹⁴ Investment in the armaments industries, 1934–35 (million rubles):

	1934–35	1934	1935
Ordzhonikidze commission claim, June 1933 ¹	3650		
Gosplan defence sector revision, August 14, 1933 ¹	2250	1400	850
Gosplan defence sector: feasible amount, August 14, 1933 ¹	1250	650	600
Military-mobilisation administration of Narkomtyazhprom ²		2034	
Rudzutak commission, December 14, 1933 ³		1051	
Final plan, February 16, 1934 ⁴		874	
Actual investment ⁴	(1666)	761	905

Sources:

¹ RGAE, 4372/91/1455, 110.

² RGAE, 7297/41/183, 19.

³ GARF, 8418/10/200, 32–35.

⁴ See Harrison and Davies (1997), 384.

¹⁵ RGASPI, 17/162/15, 146.

¹⁶ See Harrison and Davies (1997), 380; the amount actually achieved was 1,948 million rubles for equipment orders, and 5,393 million for the total defence appropriation. All these figures are in current prices.

The 1934 plan provided that industrial production in 1934 would increase by 19 per cent, which was greater than the annual average rate planned for 1933–37, 16.5 per cent. At the party congress Molotov insisted that this figure must not be reduced by even the slightest amount (see p. 14 above). Defending this high figure in the planning journal, Mezhlauk, now head of Gosplan, explained that 1933 had been ‘a breakthrough year’, in which the ‘*mastering of new enterprises*’ had made possible the more rapid development of industry in 1934, together with an increase in output per person employed and a decline in the cost of production.¹⁷ Lauer, the chief Gosplan specialist on the iron and steel industry, pointed out that the increase of its production would partly be made possible by the more efficient use of blast-furnace and open-hearth equipment, the productivity of which had declined in previous years.¹⁸

To achieve this rapid growth of industry, the 1934 plan envisaged an increase in output per worker by 13.5 per cent, together with a substantial expansion in employment. Non-agricultural employment as a whole would increase by 5.9 per cent (2,100,000 persons), in contrast to the decline of 4 per cent in 1933 (on the latter, see vol. 4, p. 539). A large part of the increase in employment was to be provided by *orgnabor*, organised recruitment from the collective farms. Most of the peasant recruits were to join the building industry. The net increase in urban population was expected to amount to 800,000 persons, including family members.¹⁹

Gosplan struggled to reconcile the targets for investment and production in 1934 with financial equilibrium. The stringent financial controls of the second half of 1932 and the whole of 1933 had succeeded in reducing the amount of currency in circulation for the first time since the currency reform of 1924. But the rate of growth of investment and production planned for 1934 confronted the authorities with serious difficulties. They concluded that the increases in the wage bill and other earnings which would result from the plans could be met by a substantial growth of the supply of food and consumer

¹⁷ PKh, 5–6, 1934, 3–4.

¹⁸ PKh, 5–6, 1934, 70 (G. Lauer).

¹⁹ The main increase (thousands) in non-agricultural employment were to come from *orgnabor* 848; higher education and factory schools 513; women already in urban families 325. Only 180,000 would be school leavers, and a mere 84,000 demobilised soldiers and former artisans. (PKh, 5–6, 1934, 154–5 – B. Markus.) A preliminary labour plan had shown an increase of only 1.25 million (RGAE, 4372/32/25, 183).

goods, following the better harvest of 1933, and by improving industrial performance in the second half of the year. In November 1933, in memoranda addressed to Mezhlauk (then deputy head of Gosplan), the Gosplan trade department noted that in real terms supplies to retail trade were planned to increase by 18.5 per cent in 1934. The department proposed that commercial trade in food products should be greatly expanded as a proportion of total trade (commercial trade was the sale of otherwise rationed goods at higher prices – see pp. 9–10 above). This would mop up the additional money incomes, and also enable the present level of commercial prices to be reduced by 4,000 million rubles. The retail prices for rationed and other low-price goods (so-called ‘normal prices’) could remain unchanged. Against this background, prices on the kolkhoz market, which had been falling since June 1933, would continue to decline in 1934.²⁰

On November 28, 1933, the Politburo incorporated a revised version of these proposals in its decision on the 1934 plan. The expansion proposed in the plan was to be achieved by a combination of a rapid increase in productivity of labour with strict financial control. The plan envisaged that wages in 1934 would be restricted ‘in all branches of the economy without exception’ to the level reached in October–December 1933. The slow increase in money incomes would form the basis of the plans for retail trade. The Politburo

²⁰ RGAE, 4372/32/25, 257–254, 252–251 – V. V. Belenko, head of administration for planning *fondy* and trade, Gosplan, to Mezhlauk, dated November 25, 23, 1933.

The following figures for retail trade (including public catering, but excluding the kolkhoz market) (in thousand million rubles) were presented in the memoranda:

	1933 (expected)	1934 (plan without price reduction)	1934 (plan with price reduction)
Socialised trade at normal prices	42.8	49.6	(44.6)
Commercial trade (including free sale of bread products)	7.2	17.4	(13.4)
Total socialised trade	50.0	67.0	58.0

The 1934 plan for socialised trade eventually approved was 60,000 million rubles (SZ, 1934, art. 13). In fact socialised trade amounted to 49,800 million rubles in 1933 and 61,800 million in 1934; within this total, commercial trade amounted to 6,300 million rubles in 1933 and 13,100 million rubles in 1934 (*Sovetskaya torgovlya* (1935? [1936]), 74). Kolkhoz market prices fell by 39 per cent in 1934 (Malafeev (1964), 402), the most substantial fall in any one year.

insisted that the increase in trade must be brought about through commercial sales, and the number of people receiving rations must not increase in spite of the increase in the labour force. It also proposed, more modestly than the Gosplan memoranda submitted a few days previously, that the reduction in commercial prices would amount to 2,000 rather than 4,000 million rubles. The net effect of these arrangements was of course that average retail prices would increase, though both the published and the confidential decisions about the plan coyly failed to state this explicitly. The Politburo also instructed Narkomfin that the plans for the state budget and the banks should be drawn up so that there was no net issue of currency in 1934.²¹

In spite of the decision to restrict currency issue in 1934, the revenue and expenditure of the state budget were both scheduled to increase by over 20 per cent.²² The main source of increased revenue was to be the turnover tax and the related tax on commercial trade, to be achieved partly by the increase in trade turnover and partly by the increase in average retail prices.

In foreign trade, a positive balance had been achieved in the second half of 1933, primarily as a result of a drastic cut in imports; this was sufficient to cover the interest and current repayment on foreign debt (see vol. 4, pp. 434–7 and 534–7). In 1934 export prospects were limited, even though large repayments of the foreign debt were still required. In November 1933, the foreign currency commission set up six sub-commissions to consider the 1934 plan.²³ In the course of the following month, draft plans for 1934 as a whole and for January–March were adopted by the main commission, and approved by the Politburo after some modification. Grain exports were not expected to exceed two million tons, slightly more than in 1933.²⁴ The foreign trade commission estimated that gold exports would amount to 60 million rubles, less than in 1933, but the Politburo increased this figure to 91 million rubles (70.5 tons), about 4 per cent more than in the previous year. Only a small proportion

²¹ RGASPI, 17/3/935, 58–62 (decision by correspondence no. 93/74, dated November 28); see also GARF, 5446/1/472, 117–25 (Sovnarkom decree art. 2589/598s, dated November 29).

²² SZ, 1934, art. 14 (dated January 4).

²³ Sub-commissions for exports; imports; the East; Torgsin; and foreign currency were set up on November 22, and a sub-commission on foreign trade contracts with Soviet enterprises on the following day (GARF, 6422/3/6, 108–109).

²⁴ GARF, 8422/3/6, 169 (dated December 31).

of the total – 6 million rubles, 4.65 tons – was expected to come from the newly-developed Kolyma gold field in the Far East.²⁵ The authorities searched for assets which would provide foreign currency, even if on a small scale. On January 23, 1934, the Politburo approved the sale of Giorgione's 'Judith'.²⁶ Most export earnings were to come from oil, timber and other agricultural products apart from grain, and total exports would be less than in 1933. In consequence, planned imports were very drastically cut to less than half the very low 1933 level, a mere one-seventh of the imports in 1931.²⁷ Even key departments of state had to struggle for every item they imported. Quite small imports required the approval of the foreign currency commission or even of the Politburo.²⁸ For the January–March quarter the foreign trade balance was even tighter. The quarterly plan showed a deficit of 37.6 million rubles, to be met from the small amount of foreign currency accumulated in July–December 1933.²⁹

(B) THE FIRST SIX MONTHS

(i) *Industry and investment*

Industry got off to a good start. In January–March 1934 production, though less than the quarterly plan, was 18.3 per cent greater than in the same period of 1933. In contrast to the previous year, it was higher than in October–December 1933 for a number of major products, including power, coal, and iron and steel.³⁰ Gosplan prepared the plan for April–June in an optimistic spirit. On March 8, the Politburo resolved that industrial production in the second

²⁵ GARF, 8422/3/6, 168 (December 3); RGASPI, 17/162/15, 145 (Politburo proposal to consider an increase); 17/162/16, 254 (final decision of Politburo, not taken until March 15, 1934).

²⁶ RGASPI, 17/162/15, 184.

²⁷ Exports were planned at 443 million rubles, and imports at 157 million rubles, as compared with 496 and 348 in 1933 (RGASPI, 17/162/15, 155–156).

²⁸ For example, on February 14, 1934, the Politburo approved the allocation of 2.5 million rubles for the purchase of French technical assistance and equipment for the manufacture of destroyers, and on February 25 it authorised the expenditure of 5,000 dollars to assist Indian earthquake victims (RGASPI, 17/162/16, 5 (art. 20/4), 6 (art. 61/45)).

²⁹ RGASPI, 17/162/15, 169, 175–176 (Politburo decision of January 19), GARF, 5446/1/464, 52–88 (Sovnarkom decree, art. 178/31s, dated January 25).

³⁰ *Osnovnye pokazateli*, March 1934, x–xxiii.

quarter should exceed the January–March level by 26 per cent, reaching nearly a quarter of the annual plan. Capital investment would amount to 6,999 million rubles, 27.9 per cent of the annual plan, a very high figure for a period of the year when the building industry would not normally reach its peak.³¹ Gosplan, in a memorandum to Sovnarkom on March 15, pointed out that the plan for industrial production would ‘*secure the fulfilment in the first six months of 49.4 per cent of the annual plan*, and thus create all the conditions for its fulfilment in the second half of the year’. Investment in the first six months would reach 48.7 per cent of the annual plan:

[This] indicates a very important *special feature of the plan*, distinguishing it from the plan of the second quarter of the previous year. *Capital investment in the second quarter of 1934 must develop with full force.*³²

This was ‘an extremely immense task’ in view of the ‘unsatisfactory preparation for the building season’. Many capital projects lacked technical plans and estimates, and were inadequately supplied with building materials.³³ A TsUNKhU report showed that investment was considerably less than planned in the first two months of the year.³⁴

In the January–March quarter as a whole investment remained less than planned, but nevertheless the period was one of financial strain. This was mainly because supplies to the consumer were substantially less than planned.³⁵ As a result, turnover tax was also less than planned. The shortfall in budgetary revenue amounted to 1,500 million rubles.³⁶ January–March is normally a period in which a considerable amount of currency is withdrawn from circulation. Even in the inflationary year 1932 currency was reduced by 220 million rubles in this quarter. But in January–March 1934 the reduction was only 161 million rubles (see Table 21).

³¹ RGASPI, 17/3/941, 11–12. On January 16, the Politburo had increased the investment plan for January–March from 5,020 to 5,214 million rubles; the increase was mainly allocated to the transport sector (RGASPI, 17/3/937, 38 – art. 180/161).

³² GARE, 5446/15/3, 106–108 (signed by Mezhlauk and Borilin).

³³ *Ibid.* 93.

³⁴ *Osnovnye pokazateli*, March 1934, 100.

³⁵ The realised market fund of both food products and industrial goods was far less than planned (see *Itogi ... po tovarooborotu*, March 1934, 14–17; food products are given in kind, and non-food products in 1934 wholesale prices of industry). Retail trade in current prices was reported as slightly less than planned (see *ibid.* 24).

³⁶ See GARE, 5446/15a/473, 1–2.

Evidently as a result of these developments, on March 25 the Politburo and Sovnarkom abruptly cancelled the decision of March 8 to increase the investment plan for April–June, blaming the ‘completely unsatisfactory preparation of building organisations’. The new decision stated that the quarterly plan was to be reduced from 6,999 to 6,000 million rubles, and the annual plan by ‘at least’ 3,500 million rubles (i.e. from 25,100 to at most 21,600 million rubles). Kuibyshev was instructed to re-examine the question within three days.³⁷

In attempting to reduce the allocations to the different branches of the economy, Kuibyshev found it extremely difficult to reach agreement with the commissariats. On March 28, the Politburo resolved to postpone the question for a further ten days.³⁸ In fact, nearly four weeks elapsed before Kuibyshev reported on April 22 that he had been able to make a cut of only 2,100 million rubles in the annual plan (reducing it to 23,000 million rubles). He added that even this cut ‘affected a whole number of projects of very great national-economic significance’. On the following day the Politburo accepted this proposal for the year as a whole, but more drastically reduced the April–June plan by 1,015 million rubles (i.e. to 5,983 million rubles, slightly below the figure they had proposed on March 25).³⁹

This reduction was not specifically mentioned in the press. An authoritative article in the Gosplan journal, in an issue not sent to press until September, even continued to give the original figure.⁴⁰ A later article on the results of the first six months of 1934 revealed the reduction indirectly, stating that investment in 1934 would be 4,500 million rubles greater than in 1933 (which implied that it would be 22,500 million rubles rather than the 25,000 million in the annual plan).⁴¹

The military were particularly reluctant to accept a cut. In February, before the proposed cuts, Tukhachevsky and Ubovich, in a trenchant memorandum to Voroshilov, argued that in 1933 the imperialist powers, including Britain, Germany and Japan, had

³⁷ RGASPI, 17/3/942, art. 58/34; 5446/1/475, 14 (art. 624/109s).

³⁸ RGASPI, 17/3/942, 24.

³⁹ RGASPI, 17/3/944, 20, 61–62. This was not quite the end of the story. On April 26 the final plan for the quarter adopted by Sovnarkom was increased slightly to 6,050 million rubles (GARF, 5446/1/84, 380–381 (art. 970)). The revised annual investment plan was approved by Sovnarkom on April 28 (GARF, 5446/1/86, 39–42 (art. 993)).

⁴⁰ PKh, 5–6, 1934, 29 (G. Smirnov), and the appendix tables on p. 185 and elsewhere.

⁴¹ PKh, 7, 1934, 11 (editorial).

decided to devote much more attention to the air force, and that sudden attack would now replace the old methods of waging war. In a prophetic passage, they declared:

The side which is not ready to destroy the aircraft bases of the enemy [etc. etc.] ... by rapid methods ... will itself be defeated in the same style, will not be able to carry out the necessary strategic concentration and will lose its frontier bases for military action.

By 1935 8,300 aircraft could be directed against the USSR, and to deal with these a stock of at least two or three times as many aircraft was required, so development must be concentrated in 1934 and 1935:

The side which goes through 1934 without a radical strengthening of its aviation will suddenly find itself, unexpectedly for itself, in a threatening position.

The authors claimed that Ordzhonikidze supported their position.⁴²

Soon after this pressure from within the armed forces, Kuibyshev nevertheless proposed to reduce the annual plan for capital construction in the armed forces from 800 to 720 million rubles. On April 8, Voroshilov protested in an indignant memorandum to Stalin that this cut would reduce the allocations to the Far East for barracks and stores, and would prevent the completion of hangars, garages and other facilities required for aviation and for naval construction, even though most building sites were already active, and 45,000 additional workers had already been recruited for the Far Eastern programme.⁴³ In spite of these protests, Sovnarkom reduced the plan for April–June from 280 to 245 million rubles, and the annual plan from 812 to 745 million.⁴⁴ Then on April 24, in a memorandum to Molotov, the Chief Military and Mobilisation Administration of Narkomtyazhprom listed factory by factory the changes required by the reduction of the investment plan for the armaments industry, particularly emphasising that

⁴² RGVA, 33987/3/400, 123–127.

⁴³ RGVA, 33987/8/663, 147, 147ob. a

⁴⁴ The annual plan was not specifically listed in the Sovnarkom decree, but is recorded in a later Gosplan report (see Harrison and Davies (1997), 380). The military files include a note dated April 25, stating that Kuibyshev and Voroshilov had agreed the size of the reduction (RGVA, 33987/3/633, 149).

they would be unable to fulfil the mobplan (the mobilisation plan) in the event of war. For example, tank industry factory No. 37 was supposed to increase its mobilisation capacity six-fold in 1935, but now this would be impossible, and tanks would have to be tested in the open air, which would make delivery in winter 'extremely difficult'.⁴⁵

Against this background Stalin, Voroshilov and other members of the Politburo indicated their support for the armed forces by participating in a concert and lunch on May 2 for 2,000 military participants in the May Day Parade. Voroshilov praised Stalin as 'leader of the Red Army, who knows it in detail'.⁴⁶ Stalin, in an unpublished speech, displayed his close attention to armaments by calling for improvements in tanks, artillery and aircraft, specifying for example the required velocity, ceiling and range of fighters, reconnaissance planes and long- and short-range bombers.⁴⁷

The plan for investment in armaments was, however, not increased. But a few weeks later Stalin made a significant concession to the military by increasing the allocation to road construction. Voroshilov, in a memorandum to Stalin dated May 27, 1934, reported that the Politburo commission on the subject had recommended a substantial increase in spite of the opposition of Grin'ko, the People's Commissar for Finance, and complained that Sovnarkom had opposed the recommendation of the commission. Without an increase in the allocation, only enough was available in the main to build poor-quality roads of 'narrow strategic significance'.⁴⁸ On June 9, the Politburo increased the allocation by 70 million rubles.⁴⁹

During April–June 1934, the economy continued to expand extremely rapidly. In 1934, TsUNKhU sent regular monthly reports about industrial production to Stalin and Molotov. These showed that the rate of growth consistently amounted to 17 per cent or more as compared with the same month in the previous year. Group A industry (producer goods, mainly produced in Narkomtyazhprom)

⁴⁵ RGAE, 7297/41/184, 155–152.

⁴⁶ P and *Krasnaya zvezda*, May 4, 1934.

⁴⁷ Nevezhin (2003), 53–4.

⁴⁸ *Sovetskoe rukovodstvo* (1999), 280.

⁴⁹ RGASPI, 17/3/946, 3, 48. According to later data, the allocation was increased from 543 to 591 million rubles (Zaleski (1980), 650). The Soviet volume on the 1935 plan reported that 550 million rubles was actually spent; a 1937 document gave the final figure as 609 million rubles (*Narodno-khozyaistvennyi plan 1935* (1935), 460; RGAE, 1562/10/468, 5). Both these figures were higher than the average fulfilment of the investment plan.

expanded by more than 25 per cent, and the armaments industries by over 30 per cent.⁵⁰ These comparisons with January–June 1933 were biased, because in the first half of 1933 industry was in crisis. But the output of Narkomtyazhprom industry was 10.2 per cent greater than in the second half of 1933, when heavy industry had begun to expand rapidly.⁵¹

These successes enabled the Gosplan journal to claim that in the first six months of 1934 industrial production already amounted to 47.8 per cent of the annual 1934 plan, a considerably greater percentage than in previous years.⁵² In Narkomtyazhprom, an increase in production of 29 per cent was obtained both by an increase in output per worker, estimated at 16.8 per cent as compared with January–June 1933, and by an increase in the number of workers by 10.3 per cent.⁵³ Narkomtyazhprom also reported that the cost of production had fallen by 6.4 per cent as compared with average costs in 1933. For the first time for many years, costs declined in the coal and iron and steel industries as well as in machine building.⁵⁴

Surveying the economy as a whole, a confidential Gosplan report on the first six months of 1934 applauded the ‘serious quantitative and qualitative development in the economy’. The rapid growth of industry was ‘a result of the consolidation of the breakthrough achieved in the second half of 1933’.⁵⁵

The Gosplan report recognised, however, that some important sectors were still in difficulties. Within heavy industry, non-ferrous metals lagged: the production of copper increased by only 8.3 per cent. The performance of the previously sluggish oil industry improved, but the output of petrol (*benzin*), critical for the aircraft and motor industries, increased by only 4.4 per cent.⁵⁶ And the performance of the

⁵⁰ GARF, 5446/27/81, 7, 9, 11, 13; these one-page reports, signed by Kraval’, deputy head of TsUNKhU, were sent to Stalin, Molotov and Kuibyshev. From March they were also sent to Mezhlauk, who replaced Kuibyshev as head of Gosplan.

⁵¹ For the 1934 figures, see *Osnovnye pokazateli-NKTP*, June and January–June 1934, 41; for 1933, see vol. 4, p. In the previous year, Narkomtyazhprom output in January–June did not increase as compared with July–December 1932, and even in 1932 it was only 5.3 per cent greater in January–June than in July–December 1931.

⁵² PKh, 7, 1934, 5 (editorial; sent to press August 5, 1934).

⁵³ *Osnovnye pokazateli-NKTP*, June and January–June 1934, 41.

⁵⁴ *Osnovnye pokazateli-NKTP*, July 1934, 114–15. Costs continued to rise in the oil extraction and non-ferrous metals industries.

⁵⁵ RGAE, 4372/333/122, 284–283 (report dated July 18, 1934).

⁵⁶ *Osnovnye pokazateli-NKTP*, June and January–June 1934, 55–78.

consumer goods industries in general was unsatisfactory. In value terms, production in January–July 1934 was only 10.8 per cent greater than in the same period of 1933. Within this total, the output of the food industry was 21.1 per cent greater in January–June 1934 than in the same months of 1933, but in 1933 these had been famine months.⁵⁷ The production of light industry increased by only 4.5 per cent,⁵⁸ dragged down by the low output of cotton textiles (–3.9 per cent), woollens (–11.1 per cent) and leather footwear (–5.5 per cent).⁵⁹ This poor performance was, of course, a result of the continuing poor supplies from agriculture: the amount of raw wool and hides continued to decline throughout 1933, and the raw cotton available from the 1933 harvest was only slightly greater than in the previous year (see vol. 5, pp. 456–7, 474). The annual Gosplan report for 1934 stated that in light industry as a whole ‘from January to May, growth as compared with the previous year declined from 7.6 to 0 per cent’; a gradual increase had begun only in June.⁶⁰

(ii) *Internal trade*

The relatively poor performance of the consumer goods industries resulted in failure to achieve the plans for internal trade in the first six months of the year. As early as March 10, Mar’yasın, still at this time only a deputy chair of Gosbank, sent a memorandum to Stalin which warned that ‘the sharp underfulfilment of the trade plan as early as the first quarter ... demonstrates the unsatisfactory position of the trade network ... and the real threat which has emerged to the annual plan for trade turnover and to our plan not to issue currency’. Mar’yasın proposed far-reaching changes in the planning and organisation of trade. Trade plans were far too inflexible, he argued, and failed to coordinate the stocks available with consumer demand. In future, a series of measures should make trade more flexible:

quarterly plans should be replaced by six-monthly plans; central trading agencies should be permitted to hold stocks to a specified amount; the regions should be permitted to move goods between the

⁵⁷ *Osnovnye pokazateli*, July 1934, 3; figures for January–June have not been available.

⁵⁸ *Osnovnye pokazateli*, July 1934, 3; these figures are for January–July.

⁵⁹ *Itogi ... po tovaroborotu*, June–July 1934, 17; these figures are for January–June.

⁶⁰ *Industrializatsiya 1933–1937* (1971), 276 (report dated January 28, 1935).

allocations for rationed and for commercial supplies, and between the state and cooperative sectors; guaranteed (*bronirovannye*) allocations should be restricted to gold and fur.

Furthermore, a People's Commissariat for Trade (Narkomtorg) should be established. The present Narkomsnab was mainly an industrial commissariat (responsible for the food industry), while the Committee for Commodity Funds had no staff, even though it was responsible for trade plans and for fixing prices. The new Narkomtorg should take over all wholesale bases and take responsibility for both state and cooperative trade. Stalin, evidently impressed by this memorandum, circulated it to members of the Politburo.⁶¹ Some of these reforms had to await the abolition of rationing; others were never carried out. But on July 29 Narkomsnab was abolished and replaced by Narkompishcheprom (the People's Commissariat for the Food Industry) and Narkomvnutorg (the People's Commissariat for Internal Trade) – often known as Narkomtorg.⁶²

Before this administrative reform, the authorities sought to provide additional consumer goods to close the gap between supply and demand which had led Mar'ysin to launch his memorandum. On March 20, a Sovnarkom decree increased the investment in local industry in 1934 by 72 million rubles and planned that its production of consumer goods should be 226 million rubles greater than in the 1934 plan. To encourage this additional production, any profits received would remain fully at the disposal of the soviet to which the local enterprise was subordinate, and the goods were to be available for sale in the region or district in which they were produced.⁶³ Then on April 1 Sovnarkom established a commission under Akulov to prepare a draft decree on private trade. The term used was *chastnaya torgovlya*, referring to non-state trade other the 'kolkhoz trade' of collective farmers. The draft decree banned private trade in agricultural raw materials purchased from others, but would have permitted trade in 'small drapery, small wooden goods and goods from chip-pings, toys, fruit, berries, vegetables, mineral waters, etc.' provided

⁶¹ APRE, 3/43/6, 43–58; the document was circulated on March 26. Stalin added the heading 'On the Planning of Trade Turnover and the Organisation of Soviet Trade'.

⁶² SZ, 1934, art. 313. For the appointment of Mikoyan and Veitser as the respective commissars, see p. 28 above.

⁶³ GARE, 5446/1/34, 285–287 (art. 583); SZ, 1934, art. 122.

that it was carried out 'on the ground, from the hands, and from trays, stalls and kiosks'.⁶⁴ But private trade was a sensitive subject; and this decree was evidently not enacted.

(iii) *Finance*

Sovnarkom sought to stabilise the financial situation by reducing budget expenditure. As usual, it tried to economise by cutting down on bureaucracy. A decree dated April 11 ordered People's Commissariats and other central establishments, and their local agencies, to reduce their staff by 14.1 per cent from 105,671 in 1933 to 90,854. This measure was to be carried out in full within ten days(!), and no new institutions were to be established without the permission of Sovnarkom.⁶⁵ On the same day a parallel decree stated that the staff of economic and cooperative agencies was to be reduced by 10–15 per cent.⁶⁶ Such proposed staff cuts were not usually achieved in practice.

In spite of these measures, budget expenditure and short-term credits crept up. A Sovnarkom decree dated June 22 stated that the failure of the railways to carry out the freight plan in January–June had led to 'serious financial difficulties'. The freight plan for July–December had to be reduced, and in consequence the subsidy allocated to the railways by the 1934 state budget would have to increase. Additionally, 150 million rubles would have to be paid out in June and 48 million rubles in July to cover the excess losses in 1933.⁶⁷

In their effort to increase revenue, the financial authorities submitted a series of memoranda to the Politburo urging that more supplies should be made available, and that retail prices in normal trade should be increased. They insistently argued that commercial trade at higher prices should be increased. In March, the Politburo agreed

⁶⁴ The commission was instructed (in Molotov's handwriting) to 'take account of the exchange of opinions at Sovnarkom' (GARF, 5446/3/8, 118).

⁶⁵ SZ, 1934, art. 157. An unpublished appendix set out the reduction to be made in considerable detail (GARF, 5446/1/85, 207–213).

⁶⁶ SZ, 1934, art. 159.

⁶⁷ GARF, 5446/1/476, 100–101 (art. 1494/259ss); this decree was approved by the Politburo on the same day (RGASPI, 17/3/947, art. 114/104).

to increase the amount of grain made available for the commercial sale of bread in 1934 from 1,638,000 to 1,802,000 tons.⁶⁸

Two months later, on May 20, 1934, the Politburo examined the balance of food and fodder grains for the remainder of the agricultural year (to June 30), and concluded that grain must be economised still further in view of the drought. The seriousness of the situation was indicated by a top-secret decision to import a small amount of grain for the Far-Eastern region. Against this background, the Politburo decided to double the ration price for bread from June 1 – a major change in the prices paid by the consumer.⁶⁹ This decision also increased the prices of meals in canteens, which until then had been a major source of nourishment at low prices.⁷⁰ In compensation the wages of lower-paid workers were to be raised by 10–15 per cent. The published decree announcing the wage increase described the existing price of bread as ‘extremely low’.⁷¹ This was a significant move towards the abandonment of the view that the ‘normal’ rationed price was the real price, and that the commercial price was exceptional. The price increase was naturally unpopular. Party officials reported rumours that Stalin was going to annul the decree, and a few months later some mandates sent by voters to candidates in the local elections called for a return to the pre-June bread prices.⁷² A secret central committee directive advised local officials to explain to

⁶⁸ RGASPI, 17/162/16, 18, no. 148/128, dated March 17. The amount eventually sold commercially in 1934 was 1,771,000 tons (*Itogi ... po trgovle*, July 1935, 16–17).

⁶⁹ RGASPI, 17/3/945, 40 (no. 187/171); for the Sovnarkom decree on the same day see GARF, 5446/57/30, 230–231 (art. 1207/206s), and for the clause on the Far East see GARF, 5446/57/34, 8.

⁷⁰ RGASPI, 17/3/946, 21 (no. 91/79, decision by correspondence, dated June 4). An exception was made for Moscow, Leningrad and the textile areas (a major strike had occurred in the textile areas in 1932, after cuts in the bread ration, and this no doubt explains why they were exempted from the increase); but even here, while the price of ordinary bread was not increased, the increase applied to sandwiches (*buterbrody* – open sandwiches) and white rolls.

⁷¹ SZe, May 28, 1934 (decree of central committee and Sovnarkom, dated May 27); RGASPI, 17/3/946, 5, 49–58 (Politburo decision no. 13/1 by correspondence, dated May 27). For the relevant decree of the Committee of Commodity Funds, dated May 29, see BFKhZ, no. 31/33, 1934. The wage increase was provided for nearly 9 million of the 23 million persons employed by the state (estimated from data in decree of May 28 and in *Narodno-khozyaistvennyi plan 1935* (1935), 645–57).

⁷² S. Davies (1997), 28.

better-paid workers that the state was unable to afford a general increase in wages.⁷³

The increase in bread prices resulted in a much-needed increase in budgetary revenue. The sum needed for the wage increase for lower-paid workers in the seven months June–December 1934 was estimated at 750 million rubles.⁷⁴ But the addition to budgetary revenue resulting from the higher bread prices was over 1,500 million rubles.⁷⁵

Nevertheless, budgetary revenue from turnover tax and commercial trade in April–June was 345 million rubles less than planned, so that the shortfall from these two sources in the first six months of 1934 amounted to as much as 994 million rubles (see Khlevnyuk and Davies (1999), Table 5). The underexpenditure on capital investment and other items of the budget as compared with the plan did not compensate for this failure; and the pressure on the currency continued to increase. Two Politburo decisions in April authorised the issue of ‘up to’ an additional 300 million rubles, but required that this issue was to be reimbursed by May 20.⁷⁶ A Sovnarkom decree of May 14 insisted that currency in circulation on July 1 should not exceed the level of January 1.⁷⁷ In fact the net issue in these six months amounted to 178 million rubles.

⁷³ RGASPI, 17/3/946, 49.

⁷⁴ This was the figure in the published decree of May 27; the Politburo estimate was 665 million.

⁷⁵ In 1934 the turnover tax paid by Komzag to the unified budget amounted to 4,574 million rubles (*Otchet ... 1934* (1935), 174–5); this excludes the payments from commercial trade. Let us assume that the sales of grain per month were approximately the same before and after the price increase (in fact they were a little higher – it may be calculated from the data in *Itogi ... po torgovle*, January 1935, 22, 25, that the market fund for non-commercial sales of flour amounted to 3,609,000 tons in January–June and 4,123,000 tons in July–December). With a doubling of prices from June 1, it may be estimated that receipts per month were 481 million rubles in June–December as against 241 million in January–May, an additional 240 million rubles; over seven months, so the additional revenue amounted to $240 \times 7 = 1,680$ million rubles. This needs to be reduced by the decline in commercial revenue due to the slight fall in commercial sales of grain in the second half of the year, and the halving of the commercial price of bread from December 1, 1934. The revenue from turnover paid by Komzag in 1934 (excluding commercial sales), 4,574 million rubles, was 2,300 million rubles in excess of the original 1934 budget (*Otchet ... 1934*, 174–5).

⁷⁶ RGASPI, 17/162/16, 49 (decisions by poll of April 19 and 25 – arts. 43/26 and 103/86); each decision authorised the issue of 150 million rubles.

⁷⁷ GARF, 5446/1/475, 198 (art. 1124/196ss).

(iv) Agriculture

Before the harvest of 1934, the grim consequences of the 1932–33 famine continued to haunt the Soviet economy in spite of the improved 1933 harvest. Cases of acute hunger – on a much smaller scale than in 1933 – were reported from a very wide area until July and later (see vol. 5, pp. 266–7, 411–12). There were also signs of improvement. On July 1, 1934, the total stock of grain in the hands of the state had increased to 2,838,000 tons, 841,000 tons more than on July 1, 1933 (see Table 21), and considerably greater than the frighteningly low stocks of July 1, 1932 – 1,362,000 tons, which had fallen to a mere 792,000 tons on August 1 (see vol. 5, p. 104). But the grain stocks at the end of the 1933/34 agricultural year were still insufficient to protect the towns and the army, as well as the peasants themselves, from a major agricultural crisis.

For the USSR as a whole, the first stages of the 1934 grain harvest were reasonably satisfactory. The land area ploughed in the spring of 1933 for the grain sown in the autumn for the 1934 harvest was substantially greater than in the previous year (see Table 25). The area sown in the autumn equalled the amount in the previous year, and was sown considerably earlier (see Table 25). The autumn ploughing in 1933 for the spring sowing of 1934 was as much as 25 per cent greater than in the previous year, and the subsequent area sown in the spring reached the same total as in 1933. The earlier the crop is sown the more likely it is to withstand later poor weather, and in 1934 sowing took place considerably earlier than in previous years, including 1930, the record crop year. These developments led Gosplan to conclude in its report on January–June that the successful spring sowing meant that the harvest would be ‘close to the 1933 harvest, in spite of the worse meteorological conditions’.⁷⁸

This prediction eventually proved to be correct. But by the time of the Gosplan report a major obstacle to success had already become abundantly obvious: the severe drought in a large part of Ukraine and adjacent areas. In contrast to the 1933 Ukrainian harvest, which had been very successful, Ukraine was now repeating the experience of 1932. On May 14 there was a sudden attempt to sow an additional 15 million hectares, with a reduction in tax by

⁷⁸ RGAE, 4372/333/122, 284–283 (report dated July 18, 1934).

50 per cent for those sowing above the initial norm.⁷⁹ Molotov on May 22, 1934, wrote to Kuibyshev about 'the threat of drought' (see p. 58 below). A few days later, the published central committee and Sovnarkom decree of May 27, announcing a wage increase for lower-paid workers in connection with the increased ration price for bread, attributed the increase in the market price of grain in May to 'the partial destruction of the sowings in the southern areas of the USSR in connection with the dry weather'.⁸⁰

In this context of nervousness about the forthcoming harvest, on June 29 a Politburo decision implicitly abandoned the earlier plan to export some two million tons of grain in 1934. It stated that until the question of the grain export from the forthcoming campaign was settled, only up to 100,000 tons of barley, 25,000 tons of rye and 50,000 tons of wheat could be exported in the third and fourth quarters of 1934.⁸¹

When the central committee plenum assembled on the same day, June 29, the drought and poor harvest in Ukraine was a major subject of attention. In his opening report, Kuibyshev claimed rather complacently that 'in spite of the dry spring, the great work undertaken by the party during the spring sowing has secured a good harvest'. Kosior, party secretary in Ukraine, admitted more frankly that the grain collections would be carried out 'in conditions of much greater difficulties' than in 1933. Even if the sowing of the late grains such as maize was successful, the Ukrainian harvest would be 'considerably lower than last year'. Khataevich, party secretary in the Dnepropetrovsk region of Ukraine, reported that much of the grain was on such short stalks that it would have to be 'shaved' rather than harvested. He asserted that in view of the poor harvest his region would provide 10–12 million puds (164,000–200,000 tons) less than planned in the control figures. Bryukhanov, deputy head of TsGK, the USSR commission responsible for measuring the grain yield, reported that the yield of the five main grains in the southern grain regions would be about 3 sentners per hectare less than in 1933.⁸²

⁷⁹ RGASPI, 17/3/945, 26. Six days later it was decided to exclude individual peasants from this arrangement (17/3/945, 39).

⁸⁰ P, May 28, 1934.

⁸¹ RGASPI, 17/162/16, 111. No further decision about grain export in 1934 has been traced.

⁸² RGASPI, 17/2/525, 3–19ob, published in TSD, iv (2002), 157, 161, 167–9, 170.

Three weeks after the plenum, on July 17, 1934, a top-secret decision of Sovnarkom drew the necessary conclusion. It reduced the compulsory grain deliveries and other grain collections imposed on the peasant and kolkhoz sector in Ukraine by one-third, from 362 to 241 million puds (5.93 to 3.95 million tons).⁸³ The authorities now had to cope with this reduction.

(C) THE SECOND SIX MONTHS

(i) *Financial and trade crisis*

The failure to keep currency issues in check led the authorities to introduce further financial restrictions in the second half of the year. On May 22, two days after the decision to increase the prices for rationed bread, Molotov, who was on leave in the Crimea, wrote to Kuibyshev, his deputy in Sovnarkom in Moscow, about the investment plan for the July–September quarter:

I've been thinking about the third quarter. I consider that it would be wrong to adopt a plan for the third quarter larger than the plan for the second quarter. It would be more correct if we adopt an *even lower construction* plan, particularly in view of the threat of drought.⁸⁴

This was a drastic proposal. The July–September quarter is the peak of the building season. The Politburo decision did not accept Molotov's pessimistic recommendations on the quarterly economic plan. On June 4, it planned investment at 6,890 million rubles as compared with 6,090 in the previous quarter, although it insisted that no supplementary capital grants would be made available.⁸⁵

⁸³ GARF, 5446/1/477, 20–22. The final plan was as follows in million puds (thousand tons in brackets): compulsory deliveries 181 (2960); payments to MTS in kind 55 (900); return of 1933 grain loan 2.9 (48); return of 1933 debt to MTS 2.3 (38).

⁸⁴ RGASPI, 79/1/798, 10–11, published in *Stalinskoe Politbyuro* (1995), 140. Kuibyshev, who had previously been in direct charge of agricultural collections and of Gosplan, was still generally responsible for both these functions in the Politburo and Sovnarkom.

⁸⁵ RGASPI, 17/3/946, 19–20, 67–70 (no. 88/76, adopted by correspondence); the planned supply of goods to the countryside was to be reduced by the same amount.

Then on June 22, noting 'serious financial difficulties' on the railways, it decided that the railways' budget subsidy for 1934 would have to be increased by as much as 643 million rubles.⁸⁶

On July 1, the mounting financial difficulties were vividly demonstrated by the July–September directives for the all-Union budget and the credit plan of Gosbank. Strenuous efforts were made to increase budgetary revenue by increasing the revenue from commercial trade, which was to amount to 2,150 million rubles, 20 per cent of the all-Union budget. The annual plan had set the revenue from commercial trade for the whole of 1934 at only 6,030 million rubles (1,500 million rubles per quarter).⁸⁷ Nevertheless, the increase in expenditure resulted in a substantial deficit, amounting to 745 million rubles. The credit plan reflected this decision in its own deficit of 686 million rubles; and Sovnarkom authorised the issue of 600 million rubles in additional currency.

Even this revised plan proved extremely difficult to achieve. On July 10 Mar'yasin, now head of Gosbank, reported to Molotov that the supply of sugar and bread products for commercial trade was far less than planned.⁸⁸ Ten days later Grin'ko, also anxious about the shortfall in revenue from commercial trade, proposed to Stalin and Molotov that building materials should be made available at commercial prices in special shops in 13 towns in the second half of 1934. He pointed out that housing trusts and individual citizens were unable to obtain wood, materials for windows, roofing iron or glass, and this led to extensive speculation in materials intended for state-planned projects, and to theft from the building sites. The proposed increase in commercial trade would increase state revenue. The proposal was not taken further. A sceptical note written on the memorandum by Chubar' asked 'Will market supplies [*fondy*] be allocated and by what channels will they reach the consumer?'⁸⁹

As Grin'ko and Mar'yasin feared, in July receipts from commercial trade were less than planned.⁹⁰ The month saw a general

⁸⁶ RGASPI, 17/3/847, 28 (art. 114/104).

⁸⁷ *Otchet ... 1934* (1935), 174–5.

⁸⁸ GARF, 5446/15a/451, 2. Mar'yasin was appointed vice-chair of Gosbank on February 11, 1932, and chair on April 4, 1934.

⁸⁹ RGAE, 6759/3/139, 79.

⁹⁰ See GARF, 5446/15a/451, 1 (memorandum to Molotov from R. Levin, deputy People's Commissar for Finance, dated August 9); revenue amounted to 685 million rubles as compared with the 753 million planned.

deterioration in the financial situation. On July 25, Grin'ko and Mar'yasin addressed a joint memorandum to Stalin and Molotov in which they pointed out that as much as 320 million of the quarterly currency plan of 600 million rubles had already been issued. They attributed the excess issue primarily to the failure to supply goods for commercial trade; and proposed a series of measures to accelerate these supplies. Two days later, on July 27, most of these proposals were accepted by the Politburo.⁹¹ In the next few weeks, further measures were adopted in order to increase revenue.

By September 30, partly as a result of these measures, the financial situation had somewhat improved. Revenue from the three main sources of budgetary income exceeded the quarterly plan (see Khlevnyuk and Davies (1999), Table 8). But state budgetary and credit expenditure evidently also increased even more than planned, and the increase in currency circulation during the quarter amounted to 725 million rubles as compared with the planned 600 million rubles.

The experience of these months convincingly demonstrated that the way out of the financial difficulties was to increase the prices of rationed goods, and the amount of commercial trade at higher prices. It also showed, however, that commercial prices could not continue at the high level which obtained when commercial supplies were small. On July 27 the Politburo was compelled through lack of sales to reduce the commercial price of sugar by about 20 per cent in the main sugar-producing regions, and in the Moscow and Leningrad regions.⁹² Then on August 13 Mar'yasin in a memorandum to Molotov complained both that some goods were in short supply and that 'the high level of commercial prices hinders the sale of a number of food goods, especially confectionery, vegetable oil, and also sugar in those regions in which the latest reduction of prices was not carried out (such as the Volga regions)'. He insisted

⁹¹ RGASPI, 17/163/1033, 496, 136–137. This was not the sole explanation of the additional currency issue. In July issue amounted to 334 million rubles (see GARE, 5446/26/6, 14), exceeding the plan by more than 130 million rubles (600 million rubles in the quarter amounts to 200 million rubles per month). But the shortfall in the tax on commercial sales was only 68 million (see previous note).

⁹² RGASPI, 17/3/949, 28 (no. 147/128, approved by correspondence). In the same decision the Politburo also agreed to the commercial sale of eggs in Moscow and Leningrad.

that the commercial prices of goods in surplus should be reduced.⁹³ Financial necessity increased the proportion of commercial trade and drove the commercial price and the normal rationed price closer together.

The growth of commercial trade brought further problems. The availability of goods on commercial sale had provided temptations and opportunities, ever since the inception of the system, for trading organisations, enterprises and individual officials to transfer goods from the closed network, where prices were low, to the commercial network for sale at higher prices. The great expansion of commercial trade in the first half of 1934 led to a burgeoning of these speculative activities. In July the authoritative KTF (Committee on Commodity Funds and Control of Trade), attached to the Council of Labour and Defence (STO) and headed by Molotov, despatched Mikoyan, Lyubimov, head of light industry, Grin'ko, Mar'yasin and other senior economic leaders to the provinces. Their remit included: 'check what is being done to deal with speculation and intensify the struggle with purchase of goods for resale, especially in view of the difference in prices between commercial and non-commercial goods'. The OGPU and the civil police (*militsiya*) should be involved in the struggle.⁹⁴

The memorandum from Grin'ko on building materials prepared at this time drew attention to 'widely developed *blat*' and to the theft of materials from building sites.⁹⁵ G. P. Tseitlin in another memorandum claimed that the widespread resale of goods by regional and district trading organisations involved 'the complete disruption (*pol-noe razrushenie*) of prices'; a double and sometimes a treble mark-up

⁹³ GARF, 5446/26/6, 4–6 (memorandum to Molotov). Molotov reluctantly supported the memorandum with a waspish comment:

CDÉS. RUDZUTAK AND CHUBAR'. Although our financial agencies are one-sidedly oriented on commercial trade and are taking little action in their own department [*po svoei liniï*], it is necessary to help them in this matter.

This memorandum is a copy, and the comment by Molotov (dated August 19) is typed, but bears Molotov's signature. Ya. E. Rudzutak, like Chubar', was a vice-chair of Sovnarkom.

⁹⁴ GARF, 6759/1/11, 74; 6759/1/621, 194–195. STO was the main sub-committee of Sovnarkom. For the functions of the KTF see V. Barnett in Rees, ed. (1997), 181. KTF was absorbed by the People's Commissariat of Internal Trade in August 1934 (*ibid.* 182).

⁹⁵ GARF, 6759/3/139, 79 (memorandum to Stalin and Molotov, dated July 20).

on the official price was charged to consumers, who also had to pay high freight charges.⁹⁶ In Gor'kii (Nizhnii-Novgorod) and other regions the closed shops in factories (Departments of Workers' Supply – *otdely rabochego snabzheniya* – ORSy and Closed Workers' Cooperatives – *zakrytye rabochie kooperativy* – ZRKy), which received substantial supplies of food and consumer goods at low 'normal' prices, were said 'in many cases to have turned into an open trade network, carrying on illegal sale of goods at commercial prices'.⁹⁷

For the most part these abuses were tackled by the traditional devices, punitive sanctions and administrative control. In the first six months of 1934 58,314 people were arrested and a further 53,000 exiled for speculation.⁹⁸ But it was now increasingly recognised that these were palliative measures; and that such illegal activities would be eliminated only if Soviet trade took place without rationing; and prices and incomes were set so that supply and demand on the retail market were in balance.

In the last few months of 1934 the course of public finance thoroughly undermined the remaining hopes of achieving a favourable financial situation before the abolition of rationing. On September 11, the Politburo approved the ceilings (*limity*) for October–December 1934, and a month later, on October 8, it approved the credit plan. The plan assumed that industrial production would continue to grow rapidly. But the amount allocated to capital investment, 5,110 million rubles, was distinctly modest. The state budget was scheduled to provide a considerable surplus, and as a result, according to the credit plan, 'at least 850 million rubles will be removed from circulation in the fourth quarter'.⁹⁹

During the quarter it became increasingly obvious that the financial plan could not be achieved. In a memorandum to Stalin and Molotov dated November 20, 1934, Mar'yasin bluntly stated that 'the course of the fulfilment of the currency plan for the fourth

⁹⁶ GARF, 5446/82/30, 60ob.

⁹⁷ RGAE, 7971/2/8, 134; this is a draft decree of Sovnarkom, September 1934. For other examples of the sale of goods at illegally high prices see Malafeev (1964), 197–9.

⁹⁸ Report from NKVD and *militsiya* to Sovnarkom, July 21 and August 20, 1934 (RGAE, 8040/8/45, 276–271). See also GARF, 6759/3/139, 69, 69a (memorandum from Prokof'ev, NKVD, to Molotov, dated July 14) on Moscow and region and GARF, 6759/3/139, 64–62 (dated August 8) on Western region. The NKVD of the USSR incorporated the former OGPU from July 1934 (see pp. 23–4 above).

⁹⁹ RGASPI, 17/3/951, 49–50, 100–102 (art. 253); GARF, 5446/1/92, 252–253 (art. 2346).

quarter will not secure the quarterly target of Sovnarkom of the USSR to withdraw 850 million rubles from circulation'.¹⁰⁰ The most significant measure actually adopted was the sharp reduction in the commercial price of sugar on December 12, which immediately resulted in huge increases in sales.¹⁰¹ In the outcome, revenue from commercial sales in October–December 1934 was less than planned, and less than in the previous quarter.¹⁰² In a report to Molotov on December 15, Gosplan estimated that the net currency issue in 1934 would be 400–500 million rubles (i.e. only about 350–450 million rubles would have been withdrawn from circulation in October–December).¹⁰³ This estimate was far too low. Only 31 million rubles were withdrawn from circulation in October–December (see Table 21). Moreover, wage arrears by the end of the year amounted to 600 million rubles, greater than on December 1.¹⁰⁴

(ii) *Preliminary moves towards the abolition of rationing*¹⁰⁵

While the abolition of rationing was not yet on the immediate agenda, developments in trade and price policy during the summer of 1934 were a major shift in this direction. Normal and commercial prices had been brought closer together, and the continuing fall in prices on the kolkhoz market meant that the gap between free-market and commercial prices was also closing.¹⁰⁶ The émigré economic bulletin published in Prague commented in its August–September issue:

the Soviet government is seeking some kind of correction and some kind of way out from the complicated confused position created in recent years on the internal market.

¹⁰⁰ GARF, 5446/27/81, 277–275; a copy of the memorandum was sent to Kuibyshev.

¹⁰¹ See Khlevnyuk and Davies (1999), Table 3, and *Izvestiya*, December 28, 1934.

¹⁰² See Khlevnyuk and Davies (1999), Table 5.

¹⁰³ RGAE, 4372/92/53, 18–22.

¹⁰⁴ RGAE, 4372/92/53, 6–7 (memorandum from Mar'yasin, dated January 13). According to the Gosplan memorandum of December 15 (see previous footnote), the wage debt on December 1 was 590 million rubles.

¹⁰⁵ The decision to abolish bread rationing, initiated by Stalin on October 22, 1934, is discussed in chapter 5, section (B) below.

¹⁰⁶ See Khlevnyuk and Davies (1999), Table 3. In Moscow the price of a kilogram of rye bread on the kolkhoz market in the first six months of the year varied between 1r85 and 2r, as compared with the commercial price of 1r50 (see the data for Moscow and other towns in *Tovarooborot SSSR za mai 1934*, 36–7).

This was ‘an experimental learning from mistakes’; ‘the experiment of rationing the market for agricultural products gave negative results, and a transition to the liberation of the food market from this artificial rationing framework is intended’. The bulletin concluded that legalising high commercial and kolkhoz market prices for food had led to the abandonment of the artificial system of prices; ‘more and more positions are being given up to true trade, taking into account the real relationship between the availability of goods and the money on the internal market’.¹⁰⁷

From August onwards several significant developments reflected the change in the attitude to trade. Mar'yasin, who went to the Azov-Black Sea region on behalf of the Committee on Commodity Funds, frankly argued in his report that the solution to the problem was to move towards the abolition of rationing, at least as far as industrial goods were concerned:

The continuation of the system (*rezhim*) of two prices for industrial goods has turned into a brake on the further development of Soviet trade, has made it more difficult to handle stocks of goods flexibly ... and has provided possibilities for repurchase and speculation ... I consider it necessary to take decisive steps even in the course of 1934 towards the unification of the prices of industrial goods.¹⁰⁸

The new attitude to trade was strongly advocated within Narkomvnutorg and the trading organisations. A memorandum on trade in Moscow advocated a shift ‘from the rails of mechanical distribution to the rails of Soviet trade’. The memorandum pointed out that in the October–December quarter commercial trade in Moscow would equal 43 per cent of the trade in rationed bread, 25 per cent of the trade in rationed sugar and 30 per cent of the ‘normal’ trade in confectionery; and praised the success of the huge grocery Univermag (universal store) which had recently been opened for sales at commercial prices in the premises of the famous pre-revolutionary Eliseev grocery store in Gorky Street (Tverskaya), and was visited by 60,000–70,000 customers a day. According to the memorandum, pressure from customers, including peasants, and

¹⁰⁷ BP, cxv (August–September 1934), 15, 19.

¹⁰⁸ GARE, 6759/1/621, 159–160.

from the Univermag, had already improved the quality of certain kinds of industrial goods.¹⁰⁹

Gosbank and the trading organisations were evidently convinced that it was now possible to take practical steps towards the abolition of food rationing. On September 14 a far-reaching proposal was made by Mar'yasin about the sale of sugar, after bread the most important of the rationed commodities. In a memorandum to the Politburo and Sovnarkom he argued that in view of the large increase in the sugar-beet harvest 'it is evident that the commercial sale of sugar cannot be carried out at the high level of prices of the current year':

In the conditions which are appearing with the production of new sugar I consider it necessary to give up *the existing practice of three prices for sugar* (urban normal, rural normal and commercial), *establish a single price and abolish the rationing system for sugar.*

Mar'yasin proposed that by December 1 a single price of 5 rubles should be introduced. As this was double the rationed price, wages of the lower-paid should be increased in compensation. Budgetary revenue from sugar would amount to 4,000 million rubles in the agricultural year 1934/35 as compared with 1,450 million in 1933/34; compensation paid out to the lower-paid over the year would be 900 million rubles; so there would be a net gain to the budget.¹¹⁰

This proposal was not approved, but its significance should not be underestimated. The official scheme for the abolition of rationing was that commercial trade should be increased and its prices gradually reduced to the level of the rationed prices. Mar'yasin's proposals implicitly rejected this scheme in favour of the more realistic arrangements towards which the authorities had been moving in practice. The new retail price should be fixed at a level between the existing commercial and rationed prices, so that demand and supply would be equal. The population would be partly compensated for the increase, but at a level which would bring about a definite increase

¹⁰⁹ RGAE, 7971/2/8, 122–125; this memorandum, which refers to the town of Moscow, is not dated, but another version in the same file (ll. 128–33) is dated October 26, 1934, and is signed by Z. Bolotin.

¹¹⁰ GARE, 5446/15a/427, 27–28 (memorandum addressed to Kaganovich and Kuibyshev as Stalin and Molotov were on leave).

in tax revenue.¹¹¹ This general scheme was adopted by the government when bread rationing was abolished three months later.

(iii) *Agriculture*

In 1934 Stalin was on leave for three months, from July 30 to October 31, and throughout most of this time he closely followed the progress of the grain campaign, and bombarded Kaganovich, his deputy in Moscow, with telegrams and letters. On August 12, after receiving a memorandum about the slow progress of the grain deliveries from D. A. Dvinsky, deputy head of the central committee secret department, he wrote sternly to Kaganovich:

If you permit the least complacency in the grain collections, we may end up on the rocks this year. Don't forget that the plan for this year is 70 million p[ud]s less than the actual collections last year.

He called for very strict control over individual peasant households, reporting the outcome to the central committee every five days; strong criticism of the negligence and wastefulness in Kazakhstan and Saratov; a campaign against grain mites, strictly condemning those at fault; and 'fierce pressure' for the return of grain loans. For good measure he added a postscript that in areas where the collections were going badly 'the party secretaries should be ordered to return from leave and compelled to put things right'.¹¹² On August 21 he instructed that Chernov, Yakovlev and Kleiner should be sent to the Saratov, Stalingrad and Chelyabinsk regions and 'compelled to collect grain conscientiously'.¹¹³

By this time it had become clear to the authorities in Moscow that the poor harvest in Ukraine would be compensated by a good harvest in the Urals, Siberia and the Volga regions. Stalin's son, visiting his

¹¹¹ Mar'yasin reported that the 'market fund' of sugar would increase from 520,000 tons in 1933/34 to 1,000,000 tons in 1934/35. As budget revenue in 1933/34 amounted to 1,450 million rubles, we can calculate that without any price change (and with the same proportion of commercial, rural and urban normal sales) the revenue in 1934/35 would have amounted to 2,780 million rubles $((1,000,000 \div 520,000) \times 1,450)$. The additional revenue was therefore $(4,000 - 2,780) = 1,220$ million less 900 million compensation = 320 million rubles.

¹¹² SKP, 432-3.

¹¹³ SKP, 446.

father in the Crimea, took with him a letter from Kaganovich about these developments. However, on August 25 Stalin responded angrily that ‘you are all counting on a good harvest in Siberia, the Urals and the Volga and ... are comforting yourselves that as there is a good harvest the collections will also be good’. He denounced this as ‘incorrect, illusory and dangerous’ and called for ‘maximum pressure’ in the regions with a good harvest. He also declared that in addition to the compulsory delivery of grain, ‘purchases’ by the state (*zakupki*) must amount to 200 million puds [3.3 million tons], and taxation pressure must be increased; ‘I would not object even to some “voluntary-compulsory” measures in regions with a good harvest to stimulate purchases of grain’.¹¹⁴ On the same day a directive signed by Stalin and Molotov obliged kolkhozy to form stocks (*fondy*) to meet the plan for *zakupki* before the grain was distributed to collective farmers to remunerate their labour-days.¹¹⁵ Then on September 6 Stalin even insisted in a further letter to Kaganovich that ‘you do not realise what a catastrophe awaits us if we do not purchase all 200 million puds of grain; ... our position is worse than you think’.¹¹⁶ On September 11 the Politburo approved a detailed decree on the *zakupki*, issued in the name of the central committee and Sovnarkom. It proposed a number of incentives for the organisations responsible for the *zakupki*, including the right of local soviets and consumer cooperatives to retain part of the grain, and above all the provision of goods to the value of 500 million rubles for kolkhozy, collective farmers and individual peasants in return for supplying the grain. A wide variety of goods was on offer, including sugar, felt boots, bicycles, gramophones and watches, and building materials of all kinds.¹¹⁷

In the previous agricultural year, 1933/34, only 0.4 million tons was collected in the form of *zakupki*, and the original plan for grain deliveries approved by the June 1934 plenum of the central committee did not set a specific plan for *zakupki*. The *zakupki* insisted upon by Stalin were certainly necessary if the state was to have grain in hand to cope with the complexities of derationing. The 1934/35

¹¹⁴ SKP, 455.

¹¹⁵ Cited from the archives in *Istoricheskie zapiski*, no. 76 (1965), 58.

¹¹⁶ SKP, 477.

¹¹⁷ RGASPI, 17/3/951, 103–113. The *zakupki* campaign was widely publicised in the press from September 21 onwards (see P, September 21, 22, et seq.) without stating the amounts involved.

grain deliveries plan, excluding *zakupki*, was no larger than the actual amount of grain collected by the state in the previous year.¹¹⁸

From September to the end of the year, the campaign for normal grain deliveries and *zakupki* continued side by side. On October 4 Kaganovich travelled to Chelyabinsk and Novosibirsk in order to accelerate the grain collections.¹¹⁹ On October 11, Dvinsky sent a message to Stalin reporting that by October 5 the grain collections exceeded the amount collected on the same day in the previous year.¹²⁰ In the letter Stalin sent to Kaganovich on October 22 announcing his intention to abolish bread rationing (see p. 122 below), his first sentence, implicitly revising his previous pessimism, stated 'The plan for the grain collections will evidently be fulfilled for the USSR.' He continued by calling for the completion of the *zakupki* in order to collect sufficient grain in the hands of the state. By the end of the year what Stalin considered the essential prerequisite for the abolition of rationing was achieved. Even more grain was collected as *zakupki* than Stalin thought essential – 3.6 million tons as against the 3.3 million tons planned. Total collections amounted to 26.2 million tons in 1934/35 as compared with 23.1 million in 1933/34.¹²¹

(D) THE OUTCOME

(i) *The conference on heavy industry, September 1934, and its aftermath*

Apart from the financial difficulties, developments in the second half of 1934 continued to be outstandingly successful. A major 'USSR Conference of Managers and Engineering and Technical Personnel of Heavy Industry' met September 20–22 in an atmosphere of great confidence and enthusiasm. In his opening address, Ordzhonikidze reported that the production of Narkomtyazhprom in January–August

¹¹⁸ The amount in both 1933/34 (actual) and 1934/35 (plan) was 20.8 million tons (these figures include deliveries by kolkhozy, sovkhozy and individual peasants, and the payment in kind to MTS, but evidently exclude the milling levy and the repayment in kind of grain loans) (see Kleiner's report to the June 1934 central committee plenum – RGASPI, 17/2/518, 72, 64–65).

¹¹⁹ SKP, 510–11, 514.

¹²⁰ See TSD, iv (2002), 283.

¹²¹ 1933/34: 22.7 collections (*zagotovki*) + 0.4 *zakupki*; 1934/35: 22.6 + 3.6. For data see I. L. Strilever *et al.* (1935), pp. 17, 167. An alternative figure for 1934/35 collections, 23.3 million tons, is given in RGAE, 4372/35/548.

1934 was as much as 28.4 per cent greater than in the same months of 1933. In striking contrast to the tension with which industry had approached the end of the year on previous occasions, Ordzhonikidze calmly noted that 'in the fourth quarter a particularly large increase is not necessary in order to carry out the quarterly programme and the whole annual plan'.¹²²

The industrial experience of 1934 convincingly demonstrated that the capacity introduced in previous years had made possible a considerable expansion of production in 1934 – and that there were good grounds for believing that this could continue in the future. At the conference, Ordzhonikidze concentrated his attention on 'the reserves which we possess, which are still not utilised, and how to mobilise them'. He pointed out that striking increases in production had already been achieved by using capital more intensively. In several major iron and steel works output per unit of plant had increased considerably during 1934:

We will not listen any longer to those who assert that good indicators cannot be achieved in our furnaces, using our ore and our coke.

If all our enterprises worked like those I have listed here, we would have far more pig iron, we would probably have 4–5,000 tons more a day.

Ordzhonikidze pointed out the further possibilities for the increased use of existing capital. The engineering industry was working at only 80 per cent of its capacity, and the armaments industry had even more spare capacity. Moreover, factories were often working for only one seven-hour shift a day.¹²³

This theme was taken up at the conference by many delegates. M. M. Kaganovich pointed out that additional production could be obtained not only by using equipment more fully and by using vacant floor space, but also by overcoming 'technological conservatism'. Machine tools should be modernised, and components and product types should be standardised.¹²⁴ The head of the Maikop oil trust acknowledged that its equipment was idle for 26 per cent of the time, and also called for the implementation of Ordzhonikidze's order that American drilling speed should be reached in at least one oil

¹²² ZI, September 22, 1934.

¹²³ ZI, September 22, 1934.

¹²⁴ ZI, September 24, 1934.

field.¹²⁵ Gurevich, head of the iron and steel industry, proposed that crude steel output per unit of open-hearth furnace should be increased from the present 3.3–3.4 tons per square metre of furnace floor to the output of the best furnaces, 4.5 tons and more. In addition, better repair of the furnaces would enable them to be used 250–300 times between repairs rather than the present 80–100 times.¹²⁶ Rataichak, head of Glavkhimprom, the chief administration of the chemical industry, admitted that ‘capacity is considerably greater than the plans received by the industry’; the main trouble was the frequent breakdowns due to poor maintenance of equipment.¹²⁷ The deputy director of the Yaroslavl’ rubber and asbestos combine reported that the previous management had been removed by Ordzhonikidze because it insisted that the plan could not be achieved without large expenditures on equipment, while the new management had trebled output of tyres per day in the course of the first nine months of 1934.¹²⁸ The head of production at ZiS, the Stalin vehicle works in Moscow, admitted that there were ‘*still very many reserves*’ in the industry: the factories had been furnished with first-class equipment which now needed proper exploitation.¹²⁹ Mitkevich, the female director of the Gorbunov aircraft factory, while noting the large increase in output per worker at the factory, pointed out that it was working far below capacity, and needed orders from outside the armaments industry to fill the gap.¹³⁰ Pyatakov, with characteristic bluntness, summed up the message conveyed by the conference by shouting out at the director of the Khar’kov turbine and generator factory ‘Your whole factory is a out-and-out reserve!’¹³¹

The particularly rapid development of iron and steel production in 1934 led to an initiative which was to have far-reaching

¹²⁵ ZI, September 23, 1934 (Borshchevskii, who pointed out that idle time in 1933 had been as much as 35 per cent).

¹²⁶ ZI, September 23, 1934 (he was head of GUMP, Glavnoe upravlenie metal-lurgicheskoi promyshlennosti).

¹²⁷ ZI, September 24, 1934.

¹²⁸ ZI, September 23, 1934.

¹²⁹ ZI, September 24, 1934 (Vittenberg).

¹³⁰ ZI, September 23, 1934. On the following day a female delegate from light industry, complaining that heavy industry should employ more women in leading positions, declared to applause that ‘I believe that women should rule our country together with men’; in reply Ordzhonikidze drew attention to the speech by Mitkevich, the only woman working in heavy industry to speak at the conference!

¹³¹ ZI, September 23, 1934; the director was Shubakin.

consequences. Manaenkov, director of the Dzerzhinsky works, announced at the conference that his factory would complete fully, and ahead of time, its plan for 'quantity, the orders placed with us, quality, and variety of output', and that this would be irrespective of the number of furnaces actually brought into operation.¹³² Following up this declaration, the representative of Stal', the steel combine, declared that the 'uniquely large reserves' in the industry would enable it to follow Manaenkov's example:

*we take on the obligation to cover the underproduction which has occurred owing to the delay in the introduction of new plant.*¹³³

In the next few years many gaps in the five-year plan were met by operating equipment more efficiently – or more intensively – than was originally planned.

The conference also paid considerable attention to the efficient use of labour, an integral element in the drive to increase output from available resources. This was very much a managers' conference. The trade union representatives were reproved for demanding more money for housing and other aspects of welfare rather than working to improve the use of the available resources.¹³⁴ A frequent theme was the need for improved labour discipline and a reduction in labour turnover. The speech of the director of the Putilov works was published under the headline 'Put an End to the Compromising Attitude to Absenteeism'. He complained that other factories had disrupted labour discipline by taking on workers who had been dismissed, and paying them more.¹³⁵ Other speakers, however, suggested that the main problem was the poor organisation of production. Berezin, the director of the Kolomna engineering works, admitted that the actual time worked per worker was only 5 hours 54 minutes in a seven-hour day, and Mitkevich gave the figure for her factory as only five hours.¹³⁶ Several senior managers admitted that their industry could manage with far less workers. Ginzburg, the head of the building industry in Narkomtyazhprom, posed '*a militant*

¹³² ZI, September 22, 1934.

¹³³ ZI, September 23, 1934 (Shleifer).

¹³⁴ See the exchange between Kosarev, on behalf of the Komsomol, and the trade union secretary Veinberg (ZI, September 23, 1934).

¹³⁵ ZI, September 23, 1934 (Ots).

¹³⁶ ZI, September 23, 1934.

task: in the shortest possible period of time, reduce the number of workers on building sites by 40–50%'. Rataichik extravagantly claimed that the chemical industry had 'three times as large a labour force as it needs'.¹³⁷

The chief engineer of a Leningrad power station, Kotonin, was the only speaker at the conference to draw attention to the dangers which could lurk in the more intensive use of equipment:

The fact that our power station plant works 6,000 hours a year is presented as a major achievement as compared with abroad, where the annual load is fixed at 3–4,000 hours. I must state, however, with full responsibility, that such an extreme loading is not an achievement, but a ruination (*ugroblenie*) of our power plant. *Equipment needs to be halted on time, examined and repaired.*

Foreign experience had shown that breakdowns were more costly than keeping plant in reserve.¹³⁸ Kotonin's view was strongly challenged by the head of Lenenergo, the Leningrad power complex, who insisted that the present reserve capacity was adequate, and claimed that Kotonin, while an experienced engineer, had not been involved in the operation of power stations in recent years.¹³⁹ The head of Mosenergo, the Moscow power complex, acknowledged that Moscow power stations had to operate at a maximum capacity of 650,000–670,000 kW, although the capacity available was only 600,000 kW:

This is a very substantial gap, and it obliges all the staff of the power stations to force through *working at full capacity*.

But he also rejected Kotonin's view that power plants should work for only 3,000 hours a year as 'profoundly mistaken'.¹⁴⁰ A few months later the Gosplan report on the 1935 plan noted that in 1934 power capacity had increased far less than planned. 'Increased power output was obtained mainly by more intensive utilisation of existing plant', and the average number of hours worked had increased from 3,704 a year in 1933 to 4,000 in 1934. Gosplan's conclusions were compatible with Kotonin's. It emphasised that the more intensive use

¹³⁷ ZI, September 24, 1934; Ginzburg was head of Glavstroiprom.

¹³⁸ ZI, September 24, 1934 (he worked at the Moscow-Narva power station).

¹³⁹ ZI, September 23, 1934 (Antyukhin).

¹⁴⁰ ZI, September 23, 1934 (Mitlin).

of plant had led to delays in repairs, and insisted that the establishment of reserve capacity in all the major power systems must be a 'central task' for 1935 and for the second five-year plan as a whole. But developments in heavy industry in the next two years on the whole confirmed Ordzhonikidze's conclusion that production could be substantially increased on the basis of existing capacity.

(ii) *Industrial production*

In its major publication *The National-Economic Plan for 1935*, issued in June 1935, Gosplan reviewed the results of the 1934 plan, and was able to claim that 'in 1934 the USSR achieved considerable new successes in carrying out the decisive economic task of the second five-year plan – improving the technical rebuilding of the economy'.¹⁴¹ 'In socialist industry 1934 was a year of steep advance', in which both the heavy and food industries had exceeded their plan. The production of industry as a whole had increased by 17.4 per cent, and of heavy industry by as much as 26.7 per cent.¹⁴² Heavy industry was particularly successful in two lagging branches. In coal mining 'a breakthrough had begun in the second half of 1933', and in 1934 production increased by 23.2 per cent.¹⁴³ And '1934 will enter the history of Soviet iron and steel as a year of steep breakthrough, a year of decisive victories in the struggle to master new technical processes and new equipment'. Production of the industry had increased by a record 39 per cent, and the production of pig iron exceeded 10 million tons for the first time.¹⁴⁴

The Gosplan report pointed out that industry achieved these results largely by a substantial increase in output per worker rather than by taking on new workers. Later data showed that in industry as a whole the number of manual workers increased by 7.2 per cent in 1934, and the number of white-collar workers and apprentices declined substantially, so the total increase in industrial employment was only 4.2 per cent – 335,000 (see Table 18). The large increases in production were mainly obtained by increased productivity (output per worker). In coal mining, following a decline in labour productivity in 1930–32,

¹⁴¹ For this volume see p. 130, n. 51 below.

¹⁴² *Narodno-khozyaistvennyi plan 1935* (1935), 10, 13–14.

¹⁴³ *Ibid.* 101.

¹⁴⁴ *Ibid.* 118.

the increase in 1934 was 14.4 per cent.¹⁴⁵ Moreover, according to Gosplan, 'heavy industry as a whole exceeded the plan to reduce production costs as a result of internal factors for the first time for many years'.¹⁴⁶ These improvements were in large part due to the coming on stream of new capital: '1934 was the first year of the mass assimilation of new machinery in labour-intensive industries'.¹⁴⁷

The increases in labour productivity were accompanied by a substantial increase in wages. In industry as a whole, daily wages increased by 14.9 per cent, nearly as rapidly as production, and in coal mining wages increased more rapidly than output.¹⁴⁸ But some improvement took place in labour discipline. The recorded number of days of both unjustified and justified absenteeism declined, and labour turnover also declined.¹⁴⁹

Against this background of rapid advance after a serious crisis, Gosplan presented in its volume on the 1935 plan a quite frank assessment of deficiencies in the economy in 1934. The timber and light industries had been particularly unsuccessful. The timber industry had failed to attract labour and had not used machinery efficiently.¹⁵⁰ Light industry 'has not yet achieved the breakthrough required', particularly as a result of 'completely insufficient work on expanding the raw material base'.¹⁵¹ Local industry also lagged behind the plan, and the artisan cooperatives had continued to lose labour in 1934.¹⁵²

Gosplan also pointed out that within heavy industry itself several sub-branches had performed badly. While the production of oil had increased after the stagnation of the previous two years, it was still considerably less than planned, largely as a result of several years in which drilling and especially exploratory drilling of new oil fields had been neglected. Oil refining lagged even more. In 1934 the production of light oils was only 10 per cent greater than in 1931, although the need for light oils had greatly increased: the production of automobiles was

¹⁴⁵ *Ibid.* 318–19.

¹⁴⁶ *Ibid.* 347–8.

¹⁴⁷ *Ibid.* 349.

¹⁴⁸ *Osnovnye pokazateli*, January 1935, 85.

¹⁴⁹ *Osnovnye pokazateli*, January 1935, 98, 93.

¹⁵⁰ *Narodno-khozyaistvennyi plan 1935* (1935), 18.

¹⁵¹ *Ibid.* 177.

¹⁵² *Ibid.* 14, 218.

18 times as great, and the production of tractors 2½ times as great.¹⁵³

Even in the most successful industries development was uneven. The production of rolled steel lagged considerably behind pig iron and crude steel. Stalin, addressing a reception for iron and steel workers at the end of 1934, while praising the 'great successes of the iron and steel industry, which is the foundation of the economy', also called for the rapid development of crude and rolled steel, to catch up with the progress of pig iron.¹⁵⁴ The 1935 plan presented a striking table which showed that as a result of low production within the USSR and of import restrictions it was not until 1934 that the total availability of rolled steel had begun to emerge from stagnation:

Supply of rolled steel (thousand tons)¹⁵⁵

	1930	1931	1932	1933	1934
Production	4671	4159	4288	4882	6723
Import	584	1275	802	427	265
Total	5262	5436	5090	5309	6968

The Gosplan report glossed over the financial difficulties of 1934. As usual, it boasted that the state budget was in surplus, but it did not mention that the surplus was more than absorbed by the increase in short-term credit outside the budget. In the course of 1934, currency in circulation in fact increased by 872 million rubles, or 12.7 per cent, although the plan had stipulated that there should be no net increase in currency during the year.¹⁵⁶ By a sleight of hand, the report claimed that 'the average annual increase in currency circulation in 1934 was maintained at the level of the preceding year'. This claim depended on the very high level of currency in circulation at the beginning of 1933, the peak of the economic crisis.¹⁵⁷

¹⁵³ *Ibid.* 107. The production of petrol amounted to only 2.74 million tons in 1934 as compared with 2.66 million in 1933 (*ibid.* 114).

¹⁵⁴ P, December 29, 1934 (speech of December 26). Apart from his speech to the Red Army on May 2 (see p. 49 above), this was his only reported address in 1934.

¹⁵⁵ *Narodno-khozyaistvennyi plan 1935* (1935), 126.

¹⁵⁶ See Khlevnyuk and Davies (1999), 563.

¹⁵⁷ *Narodno-khozyaistvennyi plan 1935* (1935), 407.

(iii) Investment

Gosplan reported that capital investment in 1934, at 21,500 million rubles in current prices, while lower than the revised plan of 23,500 million, was 17 per cent greater than in 1933.¹⁵⁸ Investment had been allocated broadly along the lines stipulated in the plan. Investment in transport, light industry, trade, education, health and housing increased particularly rapidly, while investment in heavy industry increased only slightly, and declined as a proportion of total investment (for the final figures see Table 8). The report on the 1935 plan failed to mention that the planned reduction of construction costs in 1934 by 15 per cent had not been achieved, but an appendix table quietly revealed that construction costs had remained stable in 1934, so that investment in real terms was very considerably less than in the 1934 plan.¹⁵⁹ Even so, the increase in investment put considerable pressure on the economy: the stocks of 11 of the 15 listed building materials declined in 1934.¹⁶⁰

To an even greater extent than in industrial production, the increase in construction was achieved by an increase in output per person rather than in the number of persons employed. Total employment in the building industry increased from 2,349,000 to 2,455,000, or by only 4.2 per cent. As in industry, the absenteeism and labour turnover declined, though, partly as a result of the seasonal variation in employment in building, turnover was much higher than in industry: it declined from 291.5 per cent of the average labour force in 1933 to 238.1 per cent in 1934. Wages per worker increased by 22.5 per cent, much more rapidly than in industry.¹⁶¹

(iv) The defence sector

The published Gosplan report on the results of the 1934 plan did not deal with the defence sector. In 1934 its expansion was quite modest. In practice, the Politburo had paid little attention to the strong pressure from the military and the advice of the Ordzhonikidze commission.

¹⁵⁸ However, the final figure for 1934 was 23,540 million rubles, equal to the plan (see Table 8).

¹⁵⁹ *Narodno-khozyaistvennyi plan 1935* (1935), 658.

¹⁶⁰ *Osnovnye pokazateli*, January 1935, 78; the stock of cement declined by one-third.

¹⁶¹ *Osnovnye pokazateli*, January 1935, 94–6.

For the moment, the development of industry as a whole was treated as more important than direct expenditure on defence. Expenditure on Narkomvoendel, which was renamed Narkomoborony (the People's Commissariat of Defence) in June, was considerably less than planned. In terms of current prices, it increased by 25.4 per cent. This was partly because the number of servicemen, after declining in 1933, increased from 885,000 to 975,000 in 1934.¹⁶² But a large part of this increase was due to the higher cost of maintenance of the armed forces, due to the increased prices of food and other commodities.¹⁶³

The main increase in defence expenditure in real terms was in the supply of armaments. The gross production of the armaments industries, measured in 1926/27 prices, increased by nearly 32 per cent.¹⁶⁴ However, civilian production by these industries increased much more rapidly than military production. Armaments production as such increased by 20 per cent, which was a smaller increase than for Narkomtyazhprom as a whole.¹⁶⁵ The most rapid increase was in shipbuilding, from a previously low level. The production of aircraft and chemicals also increased rapidly. But the production of weapons and ammunition increased only slightly, and remained lower than in 1932.¹⁶⁶

At the beginning of 1935, Voroshilov, in a memorandum to Ordzhonikidze about the results of 1934, acknowledged that military orders had been met to a greater extent than in 1933, supported by the improvement of industrial performance generally. But he

¹⁶² RGVA, 33987/3/1046, 146. For the renaming of the commissariat, see SZ, 1934, art. 256 (dated June 20). Gamarnik was appointed first and Tukhachevsky second deputy people's commissar. For defence expenditure, see Harrison and Davies (1997), 380.

¹⁶³ We estimate that the defence burden in terms of labour incomes slightly declined from 5.1 to 5.0 per cent of all earnings (*ibid.* 395).

¹⁶⁴ See Harrison and Davies (1997), 383, and RGAE, 4372/91/2101, 5, 3 (report to defence sector of Gosplan, dated January 25, 1935).

¹⁶⁵ Harrison and Davies (1997), 389. Typically, the 'Molotov' arms factory in Perm fulfilled its plan as a whole 'at the expense of basic (military) production'; the local representative of the party control commission expressed his 'personal opinion' that the factory should not be allowed to claim that its plan was fulfilled (RGAE, 7297/38/184, 17–16 (n.d. [December 1934])). A similar report from the Sverdlovsk NKVD was forwarded to Ordzhonikidze by Mironov on March 26, 1935 (*ibid.* 27–18).

¹⁶⁶ Shipbuilding increased by 53 per cent (389), aircraft by 15.4 per cent, chemicals by 54.9 per cent and GVMU by only 6.5 per cent. The military production of GVMU, which managed the traditional armaments industries, and did not include aircraft, shipbuilding, chemicals and tanks, had not recovered to the 1932 level (RGAE, 4372/91/2189, 32–31 (dated January 20, 1935)).

complained that production had lagged behind the plan for every item except machine guns, and lagged behind heavy industry as whole. In particular, inadequate attention had been given to the production of new weapons.¹⁶⁷

Capital investment in the defence sector increased at roughly the same rate as in the economy as a whole. Investment in Narkomoborony increased by 32 per cent, and in the armaments industries by 26 per cent.¹⁶⁸ Complaints from the armaments industries about the slow increase in investment continued throughout the year. In September, for example, GVMU complained that it had been allocated only 103 million rubles for October–December instead of the 155 million rubles which were due.¹⁶⁹ Eventually, the amount invested in GVMU was increased substantially.¹⁷⁰ But investment in the sector was far lower than the plan approved at the beginning of the year.

(v) *The Gulag economy*

By the beginning of 1934 the total Gulag population had increased to 510,000 persons (see Table 24). Data for the beginning of April show the main employment of the camp population may be divided into three categories (by this time the total number had somewhat increased) (thousands):

1 Major industrial and building sites	310
2 Work under contract	130
3 Auxiliary work	118
TOTAL	558

Sources: TsAFSB, 3/1/316, 23–7, except for North-Eastern camp, which includes the Dal'stroi trust, the population of which amounted to 29,659 on January 1, 1934, and has been added to the total (from *Sistema* (1998), 383).

¹⁶⁷ RGVA, 33989/2/220, 24–22 (dated February 4, 1935).

¹⁶⁸ Harrison and Davies (1997), 380, 384, 389. For Narkomoborony, we have taken the credits actually utilised. This figure excludes the large investments for defence purposes in the civilian sector, for which figures have not been available.

¹⁶⁹ RGAE, 7297/41/184, 133–131 (memorandum to Pyatakov from Erman, dated September 14).

¹⁷⁰ See RGAE, 7297/41/110 (report of GVMU, dated May 9, 1935).

The first category, covering 56 per cent of employment, includes the major sites established in 1930–33. The most important of these were

- (1) The White-Sea Baltic Combine (BBK), the system of enterprises and transport established round (the White-Sea Baltic Canal), completed in 1933 (see vol. 4, pp. 32, 35–6, 37, 441);
- (2) Dal'stroi, the trust responsible for mining gold in Kolyma (see vol. 4, pp. 163, 172, 274, 273n, 441);
- (3) the Moscow–Volga canal construction (see vol. 4, p. 441);
- (4) railway construction in the Far East (including BAM – the Baikal–Amur railway –, and also secondary lines to existing railways) (see vol. 4, p. 441 n);
- (5) the Ukhto-Pechora trust, comprising enterprises for the extraction of coal, oil, and other substances in the Far North.

The second category, 23 per cent, includes such camps as Temnikov and Svir', which provided timber for Moscow and Leningrad.

The third category includes camps serving the Gulag itself, engaged in agriculture and producing consumer goods. During the harsh years of hunger agricultural sections were established in 16 camps, in order not to depend on sparse central supplies; the largest of these were for Karaganda and Siberia.¹⁷¹

During 1934 the tendency to concentrate on major projects became even more marked. By January 1935 the Moscow–Volga canal employed 190,000 prisoners, BAM 154,000, BBK 66,000 (plus 22,000 special settlers), and Dal'stroi 60,000. In all, the major projects employed 64 per cent of the total camp population, which had now risen to 725,000 (see Table 24). Dal'stroi was particularly successful. Although the number employed increased only slowly, there was a marked increase in gold production (see p. 342 below). This was a result of the discovery of new sites and the construction of approach roads in previous years. On February 22, 1935, E. P. Berzin, the head of the trust, reported this progress to the Politburo, which decided to give awards to him and other leaders of the trust.¹⁷²

¹⁷¹ GARF, 9414/1/1913, 12–13.

¹⁷² RGASPI, 17/162/17, 127 (item XI) (February 22); RGASPI, 17/3/961, 44–46 (art. 182) (March 22).

The future progress of these projects depended of course on the supply of capital and labour. In 1934, as we have seen, the level of investment was hotly debated. On April 8, as part of his effort to reduce investment as a whole, Kuibyshev decided to reduce investment in the secondary railway lines in the Far East from 334 to 234 million rubles,¹⁷³ and the allocation to the Moscow–Volga canal from 400 to 300 million rubles. Five days later Yagoda, in a memorandum to Molotov, Kuibyshev and Stalin, argued that these reductions were too great, and proposed to reduce the allocations to the two projects by only 30 and 50 million rubles respectively.¹⁷⁴ The Sovnarkom decree of April 28 (see p. 47 n. 39 above) agreed to Yagoda's proposal for the Moscow–Volga canal, reducing the allocation to 349 million rubles, but eventually only 333 million rubles was invested in 1934.¹⁷⁵

In the course of 1934 and 1935, the new NKVD, established in July (see p. 24 above), took over the management of the places of confinement previously managed by the republican commissariats of justice. The RSFSR commissariat had controlled 548 places of confinement, including 259 solitary-confinement prisons, 90 factory and 89 agricultural colonies, 23 institutions for under-age offenders and 79 'colonies for mass work' (these provided prisoners by contract to various economic organisations). On December 1, 1934, there were 212,382 prisoners in all these establishments. Of these, 144,207 were at work, about half of them at industrial and agricultural enterprises within the colonies, and the other half contracted out to various organisations. There were 781 industrial enterprises within the colonies taken over by the NKVD, mainly small artisan shops producing wooden goods, building materials, clothing, footwear and other goods, mainly using local materials. The agricultural enterprises included 90 *sovkhozy* and 258 small farms and allotments, which supplied part of the food needs of the prisons and colonies.¹⁷⁶ These transfers did not fundamentally change the operation of the Gulag system, which looked on these enterprises as mainly a source of labour for its major projects.

¹⁷³ The decision to construct these lines in 1934 at a cost of 334 million rubles was taken by Sovnarkom very recently, on March 27; OGPU was authorised to remove labour for this purpose from any sites to which labour had not been specifically allocated by the government (GARF, 5446/1^b/474, 20–22).

¹⁷⁴ GARF, 5446/27/82, 31–32.

¹⁷⁵ TsAFSB, 3/2/454, 92.

¹⁷⁶ GARF, 5446/16^a/1359, 155, 164, 165, 203–215.

(vi) The railways

In the previous year, 1933, the railways suffered more than the rest of the economy from the severe strain on resources. While total investment declined by 1.9 per cent, investment on the railways declined by as much as 18 per cent. The daily number of wagons loaded did not increase, and by the end of the year the amount of freight awaiting transport had increased to 24–25 million tons.¹⁷⁷

During 1934 the resources invested in the railways substantially increased. In contrast to the previous year, investment on the railways increased more rapidly than total investment in the economy, by 39.0 per cent as against 30.8 per cent. This growth was reflected in a substantial increase in the supply of locomotives and goods wagons to the railways, and an increase in the percentage of goods wagons with automatic coupling from 17 to 26 per cent.¹⁷⁸ With the growth in the production of iron and steel, the supply of rails increased from 289,000 to 528,000 tons.¹⁷⁹ The amount spent on repair and maintenance of the railways also increased, from 200 million rubles in 1933 to 278 million in 1934.¹⁸⁰ Some improvement also took place in the efficiency with which resources were used: the fuel used declined from 0.285 to 0.265 tons per thousand ton-kM.¹⁸¹ These developments resulted in a substantial increase in the freight carried by the railways, from 51,200 to 55,700 wagon loads per day.¹⁸² The amount of freight awaiting transport declined from 24–25 million tons at the beginning of 1934 to 15 million tons at the end of the year.¹⁸³ This growth in railway activity was accompanied by a substantial increase in the number of manual and white-collar workers employed on the railways, from 1,182,000 to 1,295,000, or by 9.5 per cent. The monthly wage also increased substantially, by 15.9 per cent.¹⁸⁴

¹⁷⁷ See Rees (1995), 103, 229, 231.

¹⁷⁸ *Zheleznodorozhnyi transport* (1970), 414–15.

¹⁷⁹ *Zheleznodorozhnyi transport* (1970), 258.

¹⁸⁰ *Osnovnye pokazateli*, 1934, 89.

¹⁸¹ *Osnovnye pokazateli*, 1934, 84.

¹⁸² Rees (1995), 231.

¹⁸³ *Ibid.* 103. However, the Gosplan report on the 1935 plan stated that in 1934 the inadequate availability of rolling stock had led to the ‘increased accumulation of stocks of coal at the point of production’.

¹⁸⁴ *Osnovnye pokazateli*, January 1935, 94–5. The number employed in workshops attached to the railways increased much more slowly, from 165,000 to 170,000.

In spite of this improved performance, the railways were only beginning to emerge from crisis. They continued to suffer from serious accidents, and these were dealt with by savage persecution of the railwaymen held responsible; between March and July 1934, in a series of trials, death penalties were imposed on engine drivers and minor officials.¹⁸⁵

The commissariats who were the clients of the railways considered their performance to be wholly inadequate. At the seventh congress of soviets on January 30, 1935, Ordzhonikidze complained in strong terms:

A huge quantity of metal, fuel, building materials and finished goods is awaiting transport. For Narkomtyazhprom it amounts to over 450,000 wagon loads ... These goods are extremely necessary. Without these materials, the economy cannot develop normally.¹⁸⁶

At the beginning of 1935 Narkomput', the commissariat for transport, submitted a report to Sovnarkom calling for a radical change in policy. It complained that the failure to supply sufficient rails was 'one of the most difficult and dangerous troubles of railway transport'. It pointed out that in 1913 the railways had received 590,000 tons of rails, more than the 528,000 they received in 1934, but in 1913 the railways carried only 66,000 million ton-km, as compared with the 205,000 million ton-km carried in 1934.¹⁸⁷ By the end of 1934 the Politburo began to afford the railways the priority which was long overdue.

(vii) Agriculture

The size of the harvest was, as usual, the subject of considerable controversy. On May 10, 1935, Mezhlauk in a report to Molotov estimated the 1934 harvest at 89.4 million tons, as compared with 89.8 million tons in 1933, on the basis of a yield estimated at 8.5 tsentners a hectare.¹⁸⁸ But on December 15, 1935, Bryukhanov, reporting to Stalin and Molotov on behalf of the state harvest evaluation commission TsGK, claimed that these estimates on the basis of the so-called 'normal economic harvest' made inadequate allowance for losses. This was because the committee had available only data on the harvest on the root for

¹⁸⁵ Rees (1995), 97–8.

¹⁸⁶ See *Zheleznodorozhnyi transport* (1970), 259–60.

¹⁸⁷ *Zheleznodorozhnyi transport* (1970), 257–9.

¹⁸⁸ TSD, iv (2002), 487.

some grains and on the threshings in a limited number of kolkhozy. However, Bryukhanov explained, much fuller data were now available and it was possible to estimate 'the only real magnitudes which it is possible to measure and check: 1) the harvest on the root and 2) the actual gross grain harvest'. Re-examining the data for 1934, Bryukhanov's own calculations showed that the yield was only 7.3 tsentners a hectare and the actual harvest (*fakticheskii sbor*) was 76.5 million tons.¹⁸⁹

This was the closest an official estimate came to a realistic view of the harvest. But it was unacceptable to the authorities. In 1933 the Politburo had officially decided that the 1932 harvest amounted to 69.87 million tons, and this very high figure was treated as an absolute truth, and was still used by Russian historians as late as 1995 (see vol. 5, p. 444). The much better harvests from 1933 onwards had to be compatible with this figure for 1932; and the TsGK figure of 76.5 million tons for 1934 was rejected in favour of 89.4, as compared with 89.8 million tons in 1933 (for the fate of the TsGK, see pp. 360–1 below). The grain–fodder balances compiled at this time were brought into balance by including an item *nevyazka* (disjuncture), amounting to 14.6 million tons in 1933 and 17.1 million in 1934, so that the harvest net of the *nevyazka* amounted to 75.2 and 72.3 million tons.

Although the harvest in 1934 was somewhat lower than in the previous year, Soviet industry had supplied massive new amounts of mechanical power to agriculture which would eventually compensate for the enormous decline in horse power in 1930–33.

Total tractor horse-power supplied (thousands)

	<i>January 1, 1934</i>	<i>January 1, 1935 (prelim)</i>
To sovkhozy	1395	1714
To MTS	1762	2707
Total ^a	3266	4410

Source: *Osnovnye pokazateli*, 1934, 49.

Note: ^a These totals given in the original source do not equal the total of the separate items.

In the course of 1934 the total horse power used in agriculture increased by 35 per cent. The horse power available increased more

¹⁸⁹ TSD, iv (2002), 641; see also p. 234 below.

rapidly in MTS than in sovkhozy, by 53.6 per cent as against 22.0 per cent. The percentage of the kolkhoz sown area served by MTS increased from 58.6 to 63.9 per cent.¹⁹⁰ In 1934 the supply of spare parts, often a bottleneck, increased by 55 per cent.¹⁹¹

The production of cotton declined in 1934. In November Kuibyshev went to Central Asia in order to invigorate the collection of the cotton crop. On November 7 he wrote to Stalin and Molotov from Uzbekistan blaming the former landowners (the *bai*) for much of the difficulty, and he was given the right to form a *troika*, consisting of himself, the Uzbek party secretary and the chair of the soviet executive committee, with the power to impose the death penalty.¹⁹² Similar *troiki* were established on Kuibyshev's initiative in the other Central Asian republics (this power had already been given to Eikhe in West Siberia – normally the death penalty required the sanction of a special commission in Moscow). But the total raw cotton crop collected amounted to only 1.18 million tons as compared with 1.32 million tons in the previous year (see Table 30).

In 1934 the harvests of vegetables and flax also declined slightly, and the number of horses continued a slow decline. But the harvest of potatoes and sugar beet increased, as did the number of livestock. On January 1, 1935, TsUNKhU carried out a comprehensive livestock census, involving 25 million agricultural households, and Osinsky reported to Sovnarkom that '1934 was a year of almost universal break-through' in livestock. 'In 1934 the number of cattle increased by 15.8 %, sheep and goats by 11.8% and pigs by 47.8%.' The number of working horses declined, but only from 13.3 to 12.8 million, a far slower decline than in previous years¹⁹³ (see also Table 31). The decline in the number of horses was far less than the increase in mechanical horse-power. The official estimate of an increase in gross agricultural production in 1934 by 6.7 per cent was quite realistic.¹⁹⁴

With the expansion of agricultural activity in 1934, the number of labour days worked by collective farmers, particularly by women, increased. This was shown by a TsUNKhU report comparing the

¹⁹⁰ *Osnovnye pokazateli*, 1934, 48.

¹⁹¹ *Osnovnye pokazateli*, 1934, 51.

¹⁹² GARF 5446/27/73, 3; delo 27 contains much further information about Kuibyshev's activities in Central Asia at this time.

¹⁹³ TSD, iv, 443–57 (prepared after April 1, 1935).

¹⁹⁴ *Osnovnye pokazateli*, 1934, 44.

family budgets of collective farmers in January–September 1933 and 1934.

Number of labour days worked by an average collective farmer aged 16 to 59

	<i>January–September 1933</i>	<i>January–September 1934</i>
Men	186	190
Women	89	110
Both sexes	136	149

Source: published in TSD, iv (2002), 278.

The average number of labour days spent in non-agricultural occupations increased from 19 to 29.

A further TsUNKhU survey of 83,000 collective farms showed that the amount received in kind and in money by collective farm households from the kolkhozy for their labour days increased substantially:

<i>Received per household</i>	<i>January–December 1932</i>	<i>January–December 1933</i>	<i>January–December 1934</i>
Grain (tons)	5.5	9.83	10.92
Potatoes (tons)	2.1	5.74	7.83
Vegetables and cucurbits (tons)	0.5	1.41	2.25
Money (rubles)	88	103	129

Source: published in TSD, iv (2002), 362–3.

Note: the survey did not include monetary receipts from livestock or from special crops.

Receipts in grain in Ukraine were sharply different, owing to the fate of the Ukrainian harvest in the three years: 1932 2.52 tons; 1933 9.66; 1934 4.69, but the potatoes, vegetables and money received per kolkhoz household in Ukraine increased in 1934.

Collective farmers also increased substantially their production on their household plots in 1934.¹⁹⁵ In consequence there was a

¹⁹⁵ See TSD, iv (2002), 279.

substantial increase in trade on the kolkhoz market from 11,500 to 14,000 million rubles, even though prices on the market declined.¹⁹⁶

In 1934 the party central committee decided to undertake a thorough review of the state of collectivisation and to that end collected material from the regional parties and on July 2, 1934, convened a conference 'On Questions of Collectivisation'. Only about 69 per cent of peasant households were collectivised at the beginning of 1934, and the discussion turned on the relative position of collective farmers and individual peasants, and what should be done about it. The data collected, and the proceedings of the conference, devoted most attention to the economy of the remaining individual peasants and to the role of the household plots of the collective farmers. In his memorandum preceding the conference, Postyshev, Ukrainian party secretary, reported that there were three main types of individual peasant:

- (1) those who possessed agricultural land on which grain could be grown as well as a household plot; agriculture was their main source of income;
- (2) those who possessed only a household plot – they cultivated vegetables and potatoes on their household plot, and the sale of these on the market, plus their work in sovkhozy and industry, and also for the local kolkhoz and collective farmer, was their main source of income; the substantial number who owned a horse also engaged extensively in cartage;
- (3) peasants without a substantial economy of their own, who worked in industry and building, and often also engaged in speculation and theft.¹⁹⁷

Other reports noted that many individual peasants lived near district towns, where it was possible to work in the towns and sell produce to the inhabitants; other groups or even whole villages of individual peasants lived in remoter parts of a region. Reports from the Central Black-Earth region, the North Caucasus and Siberia also emphasised the strong position of individual peasants who owned a horse, and the

¹⁹⁶ See RGAE, 1562/12/2122, 29, and 1562/12/2322, 77, and Table 19). It is not known what proportion of this trade was by individual non-collectivised peasants.

¹⁹⁷ TSD, iv (2002), 129–32.

high earnings which could result.¹⁹⁸ The reports also noted that individual peasants were less restricted than collective farmers in deciding what work to engage in outside agriculture, and placed great emphasis on their ability to conceal their earnings from the tax collectors. But regional leaders also admitted that they lacked sufficient knowledge of the economy of the individual peasants. Kosior, party secretary in the Dnepropetrovsk region, noted at the collectivisation conference ‘it must be honestly admitted that you rarely see the individual peasant – when you go into a village, you only see and talk with collective farmers, you rarely meet an individual peasant in the field or go into his cottage – we don’t seek them out’.¹⁹⁹

At the conference on July 2, Stalin played an active part, frequently questioning the speakers. He concluded the proceedings by a speech outlining future policy.²⁰⁰ He insisted that ‘what we have created in 2–3 years is a major achievement’, and that there was no need to force the pace of collectivisation – it would be sufficient if it grew by 2, 3 or 4 per cent a year. Within the kolkhoz, the size of the household plot should vary according to circumstances, and ‘it would be inexpedient to restrict or reduce the household plot – this is not the time’. But at present the household plot of the individual peasant was often larger than that of the collective farmer, and this was wrong:

In all our work and activity, both legislative and administrative, one idea must prevail – that the collective farmer should have more rights and privileges than the individual peasant.

It would be wrong, however, to ‘arrest, punish or shoot’ the individual peasants – economic and financial measures must be used to persuade them that it would be better to join the kolkhoz or leave for the town than continue as an individual peasant.

Responding to this approach, on September 15 Molotov in a telegram from Omsk, where he was pressing forward the grain collections, proposed that, as in 1932, a ‘one-time tax’ on the individual peasants should be introduced, yielding 300 million rubles. He argued that this was required because of ‘the growth of money incomes, especially in connection with the large harvest of vegetables and increased income from cartage’, and urged that it should be

¹⁹⁸ TSD, iv (2002), 139–40, 233–4.

¹⁹⁹ TSD, iv (2002), 177.

²⁰⁰ TSD, iv (2002), 186–92.

higher on peasants living near towns.²⁰¹ The tax was duly introduced on September 26, and yielded 331 million rubles; it was sharply differentiated in accordance with the estimated earnings of types of peasants.²⁰²

The regional parties undertook considerable efforts to accelerate the pace of collectivisation and impose greater restrictions on the individual peasants in the months which followed the conference. Thus I. M. Vareikis and E. M. Ryabinin, reporting from the Voronezh region (formerly part of the Black-Earth region) on November 17, described the measures they were taking to push the individual peasants into the kolkhozy, and the party secretary of the Kiev region reported on November 19:

In the past six months the regional committee has taken a number of ... measures aimed at getting individual peasants to understand that they will be allowed no privileged conditions. These include severe requirements that every individual peasant should fulfil all his obligations to the state.²⁰³

In consequence, the percentage of households collectivised in the region had increased from 74.2 per cent on April 1 to 81.0 per cent on October 1. This was part of a general trend. In the USSR as a whole, the percentage of households collectivised increased from 68.9 per cent to 77.2 per cent between January 1934 and January 1935.²⁰⁴

In 1934 the authorities also undertook an important step to consolidate the organisation of the kolkhozy. In January 1933, in the midst of the agricultural crisis, *politotdely* (political departments) had been established in both the MTS and the sovkhozy, staffed by party members brought in mainly from Moscow, Leningrad and the army. These were men with long party membership and relatively good education, who had been thoroughly checked for political reliability. Their function was both to clear out unreliable officials from agriculture and to seek to introduce agricultural improvements (see vol. 5, pp. 358–62). On the whole, their activities had a positive effect from the point of view of the authorities, and many of them

²⁰¹ TSD, iv (2002), 219; he tactfully added the proviso ‘only if approved by comrade Stalin’.

²⁰² SZ, 1934, art. 380 (decree of TsIK and Sovnarkom; *Otchet ... 1934*, 195).

²⁰³ TSD, iv (2002), 260–5.

²⁰⁴ *Osnovnye pokazateli*, 1934, 46.

quickly gained a realistic attitude to agriculture and were able to persuade higher authorities to take a more realistic attitude to rural problems. But the functions of the politotdely and the district party and soviet organisations greatly overlapped and as early as January 1934 Kaganovich hinted that the politotdely could not remain a permanent feature of the countryside.²⁰⁵ During 1934 the friction between the politotdely and the district soviets increased. At the same time there were increasing complaints from the central authorities that the politotdely were guilty of 'localism' (*mestnichestvo*), which evidently meant in practice that they tended to represent the interests of their MTS and kolkhozy to the higher authorities rather than merely imposing the wishes of the authorities on the peasants.²⁰⁶ In September Kaganovich, in a report discussing leading party agencies, clearly intimated that the politotdely would in future be abolished.²⁰⁷ But the future of the politotdely was not finally settled. On November 26 Kosior strongly praised the positive role played by the politotdely at the central committee plenum which discussed the abolition of bread rationing, and declared that 'there cannot be any talk about and the party does not pose the question of the abolition of the politotdely, as some are inclined to think'. Stalin interrupted 'If they have fulfilled their function, then they must be abolished.' But Kosior continued to argue that there were so many problems in the districts that the politotdely should be strengthened.²⁰⁸ But the plenum resolved to abolish the politotdely by fusing them with the district party committees, though in every MTS an official would serve as the secretary of the party organisation and the head of the political sector of the MTS and could not be removed without central committee permission.²⁰⁹ The party members who had been sent to man the politotdely were encouraged to continue to work in the rural party and many of them remained in leading positions.

²⁰⁵ *XVII s"ezd* (1934), 560.

²⁰⁶ See Miller (1970), 243–4; IZ, no. 76 (1965), 56–7 (Zelenin); Shevlyakov (2000), 206–7.

²⁰⁷ The report was delivered on September 2, but not published until 11 November 24, 1934. See also Miller (1970), 245.

²⁰⁸ TSD, iv (2000), 326–7.

²⁰⁹ The politotdely were abolished during the first few months of 1935.

CHAPTER FOUR

1935: THE GROWING THREAT OF WAR

In 1935 the threat of fascism to world peace greatly increased. The Axis – Germany, Italy and Japan – began to be established, and Nazi rule in Germany was consolidated. The looming menace of Nazism became increasingly obvious. On January 13, in accordance with the Versailles treaty, a plebiscite was held in the Saar, and the population voted to rejoin Germany. The overwhelming vote demonstrated that Germans could be rallied by the Nazi patriotic appeal. Two months later, on March 13, in defiance of the Versailles treaty, Germany declared itself free from the obligation not to build military aircraft.¹ Three days later, again ignoring the treaty, Hitler announced the introduction of compulsory military service.²

The Soviet reaction was sharp. In March, a British government delegation visited Berlin and Moscow. On March 28, Litvinov told Anthony Eden, Lord Privy Seal and a member of Baldwin's Cabinet, that 'we do not have the slightest doubt of German aggression; German foreign policy is inspired by two main ideas – revanche and domination in Europe'.³ On the following day, Stalin was even more pessimistic in conversation with Eden:

I think the position now is worse than in 1913 ... because in 1913 there was only one centre of military danger – Germany – and now there are two – Germany and Japan.

In contrast to Litvinov, who had told Eden that 'in Japan, even in military circles, a tendency to maintain peaceful relations with the USSR is growing rapidly', Stalin declared that 'the situation in the Far East is extremely alarming'; the improvement was 'merely temporary'.⁴

For the moment Litvinov's view of the situation in Japan had acquired some credibility as a result of the completion of the

¹ See DVP, xviii (1973), 616.

² This announcement was immediately reported in the Soviet press (see P, March 17 and 18, 1935).

³ Record of conversation printed in DVP, xviii (1973), 235–6.

⁴ Record of conversation printed in *ibid.* 247–8.

long-negotiated sale of the Chinese Eastern Railway to Japan on March 23, 1935.⁵ But Litvinov's efforts to conciliate Japan proved increasingly unsuccessful. Border incidents were frequent and from June Japanese pressure on Outer Mongolia increased.⁶

Immediately after Eden's visit to Moscow, Soviet disquiet at German rearmament was publicly expressed in a sensational article by Tukhachevsky, 'The Military Plans of Present-Day Germany', which appeared in *Pravda* on March 31. The article attacked the German 'revanchist aggressive policies', and emphasised that they were directed against France, Belgium, Austria and Czecho-Slovakia as well as the USSR. Tukhachevsky claimed that Germany would soon have up to 3,700 military aircraft; by the summer of 1935 her armed forces would include at least 800,000 men, more than in the French army and nearly as many as in the Soviet Union. The article was approved by Stalin after some heavy editing which did not change the substance of Tukhachevsky's message.⁷

A few weeks later, on May 2, a Mutual Assistance Pact was signed in Paris by the French Foreign Minister, Laval, and the Soviet ambassador in Paris, followed on May 16 by a similar pact with Czecho-Slovakia.⁸ Following the signature of the Pact, Laval visited Moscow and on May 16 Stalin, thrusting aside the long-established Comintern hostility to the militarisation of the bourgeois powers, publicly 'expressed full understanding and approval of the policy of defence carried out by France to maintain its armed forces at a level consonant with its security needs'.⁹ This was an important encouragement for Litvinov's policy of establishing collective security in Europe.

The Franco-Soviet accord was soon followed by consolidating the turn in Comintern policy, launched in the previous year (see p. 16 above), from the United Front of the masses against the bourgeoisie

⁵ See Slavinskii (1988), 53. On the same day the Politburo ruled that the first Japanese payment was to be used solely for the purchase in the United States, Britain and Germany of equipment for the ZIS vehicle factory in Moscow (RGASPI, 17/162/17, 157–158 – art. 189).

⁶ See Haslam (1992), 43–60; Safronov (2001), 145.

⁷ For the draft text and Stalin's corrections see *Izvestiya TsK*, 1, 1990, 160–171. The German ambassador and military attaché protested indignantly about the article to Litvinov and to the foreign department of Narkomoborony.

⁸ DVP, xviii (1973), 309–12, 333–6. For the English text of the Franco-Soviet pact, see Keith, ed., ii (1938), 29–33.

⁹ DVP, xviii (1963), 337, reported in I, May 16, 1935.

to the Popular Front of democratic forces against fascism.¹⁰ In mid-July a huge Rassemblement Populaire was held in Paris, attended by such politicians as Daladier from the Radicals as well as the Communist leader Thorez. Then from July 25 to August 21 the VII Comintern Congress, the first congress since 1928, convened in Moscow amid a blaze of publicity in the Soviet and Western communist press. In his keynote speech Dimitrov, who was elected General Secretary of Comintern, called for 'the erection of a *broad anti-fascist popular front on the basis of the proletarian united front*'. Thorez, for his part, acknowledged that it was now possible to support an 'anti-fascist bourgeois government'.¹¹

The bitter Nazi hostility to communism, against which these moves were directed, was certainly the dominant trend in German foreign policy in 1935. But behind the scenes Schacht, minister of economics and head of the Reichsbank, headed an effort to improve economic relations with the USSR in a desperate search for raw materials and for economic equilibrium in a Germany just emerging from the world economic crisis. In separate conversations with the Soviet ambassador in Berlin, Surits, and the trade attaché Kandelaki, Shacht emphasised the importance of German–Soviet economic relations and improved relations generally.¹² On April 9, the agreement that the Soviet Union should receive a 200 million Mark five-year credit for the purchase of investment goods (see pp. 15–16 above) was finally signed.¹³ Then in June Schacht offered the USSR a huge 1,000 million mark ten-year credit, the imports from Germany to be paid for in oil and metals. For the moment fear of Germany predominated in Moscow, and the offer was rejected by the Soviet government on ostensibly technical grounds; Litvinov privately dismissed it as a 'German manoeuvre'.¹⁴

However, French adherence to the Franco-Soviet Pact soon proved not to be dependable. And Britain displayed no disposition to join

¹⁰ For earlier developments see p. 16 above.

¹¹ See Carr (1980), 406–7. On August 10 the Soviet Politburo approved the administrative restructuring of Comintern, including the establishment of a secretariat consisting of seven full and three candidate members (RGASPI, 17/162/18, 110 – art. 129).

¹² Surits to Litvinov, January 16, 1935 (reported from the archives in VI, 5, 1991, 144); Bessonov to Litvinov, February 16 and April 12, 1935, reporting Kandelaki's conversations with Schacht (DVP, xviii (1973), 53–5; VI, 5, 1991, 147).

¹³ DVP, xviii (1973), 270–4; the goods were to be purchased within twelve months.

¹⁴ DVP, xviii (1973), 646–7.

France and the USSR in an anti-fascist alliance. British contempt and mistrust for the Soviet Union was symbolised by the failure of Sir John Simon, the Foreign Secretary, to visit Moscow with Eden after their meeting with Hitler in March. And in June the wish to appease Germany which prevailed in British policy was confirmed by the Anglo-German naval agreement, which violated the Versailles treaty.¹⁵

In view of the shaky foundations of collective security, the Soviet Union did not close the door to a positive response to Schacht's advances. On November 2, the Politburo established a commission headed by Ordzhonikidze 'to discuss the orders we may place with Germany if an 800-million mark credit becomes available'.¹⁶

Litvinov strongly resisted the widening of economic relations with Germany. On December 3, in a secret memorandum to Stalin, he assured him that he had confirmed the TASS reports that Schacht had told the head of the Banque de France that Germany intended to divide up Soviet Ukraine with Poland. Litvinov added contemptuously that although 'Schacht supports Hitler's aims of conquest in the East', 'cde. Kandelaki recently proposed we should support him against Hitler'. Litvinov's memorandum also criticised the Soviet press for its 'Tolstoyan position of non-resistance to evil'. He agreed that economic relations with Germany should continue, but opposed the placing of large orders for imports from Germany: 'this would give substantial support to German fascism, which is in very great economic difficulties at present':

whatever the conclusions reached by the Narkomtyazhprom commission, the issue of orders to Germany should be limited to 100, or a maximum of 200 million marks.¹⁷

¹⁵ The agreement provided for Germany to construct up to 35 per cent of the naval tonnage of the British Commonwealth, a figure which had been publicly proposed by Hitler in March (for these events see Keith, ed., ii (1938), 36, 51-4).

¹⁶ RGASPI, 17/162/18, 48 (art. 265). According to the Soviet archives, German anxiety to reach agreement on additional credits to Moscow was reflected in an agreement on December 12 between Herbert Goering and Blomberg, Minister for War, to be 'prepared to meet Soviet orders for military hardware, including the most complicated' (VI, 5, 1991, 148). Herbert Goering was Hermann Goering's cousin and a senior adviser to Schacht.

¹⁷ Published from the archives in *Izvestiya TsK*, 2, 1990, 211-12. These figures were evidently additional to the 200 million mark credit agreed in April.

Meanwhile, on October 2–3, Italy had invaded Abyssinia (now Ethiopia). This was the most flagrant act of aggression since the Japanese invasion of Manchuria in September 1931, and it brought Italy closer to Germany and Japan. In spite of its fascist government, Italy had so far been on consistently good terms with the Soviet Union. When the invasion of Abyssinia was imminent Stalin at first displayed a wholly inadequate understanding of the fascist threat. He wrote to Kaganovich and Molotov on September 2 that ‘the conflict is not so much between Italy and Abyssinia as between Italy and France on the one hand, and Britain on the other hand’. Two ententes were emerging, Italy and France versus Germany and Britain, and the Soviet Union should ‘encourage them to fight with each other’.¹⁸ Ten days later, however, in a further message to Kaganovich and Molotov, he indicated his opposition to Italy and ‘the supporters of aggression and war’ – but still insisted that ‘Litvinov wants to follow the British line, but we have our own line’.¹⁹ However, by the time the invasion took place he had come round to Litvinov’s position. On October 4, he agreed to sanctions against Italy providing they were supported by other members of the League of Nations.²⁰

Soviet scepticism about the reliability of the alliance with France was soon confirmed. Sanctions against Italy were introduced by the League of Nations, but they were placed in jeopardy in December by the abortive effort of Laval and Sir Samuel Hoare, the new British foreign minister (known in left-wing circles in Britain as ‘Slippery Sam’) to secure the League’s support for a compromise at the expense of Abyssinia.²¹ At the end of the year, the future of collective security remained uncertain, and on January 11, 1936, at a session of TsIK, Molotov, while strongly criticising the militarisation of Germany, noted the success of the credit agreement of 1935 and called on the government of Germany to draw ‘practical conclusions’ from the Soviet policy of ‘developing commercial and economic relations with other states’. But his main message was that ‘we toilers of the

¹⁸ SKP, 545 (ciphered telegram).

¹⁹ SKP, 563–4 (ciphered telegram, dated September 12).

²⁰ SKP, 602 (ciphered telegram); this proposal was endorsed by the Politburo on the same day (RGASPI, 17/162/18, 172–173).

²¹ See DVP, xviii (1973), 591–2 (telegrams of December 15 and 16). Public indignation in Britain led to Hoare’s resignation, but he still remained in the Cabinet. He was replaced by Eden.

Soviet Union must rely on our own efforts to defend our affairs and above all, on our Red Army'.²²

As in 1934, the Soviet defence budget, when it was adopted at the beginning of 1935, was fairly modest. Expenditure on Narkomoborony was planned to increase by 20 per cent, more rapidly than the state budget as a whole, but most of the increase did not represent a growth in real terms – it was due to the rise in prices and other payments following the abolition of rationing.²³ Expenditure on armaments within the defence budget was also planned to increase rapidly (see pp. 203–4 below), but capital investment, like capital investment as a whole, was planned to decline in 1935, from 717 to 628 million rubles.²⁴ Total expenditure on all aspects of defence, including the NKVD armies, was planned to increase by 30.7 per cent, from 9,134 to 11,938 million rubles.²⁵

In the course of 1935, defence policy changed radically. On March 22, the Politburo approved a plan from Narkomoborony to strengthen the Western and Eastern frontiers, requiring an additional allocation to the commissariat in 1935 of 315 million rubles. This meant that capital construction by Narkomoborony, instead of declining by 12 per cent, was now planned to increase by 32 per cent.²⁶

The second major revision in defence plans was the decision of the Politburo on May 5 to increase the size of the armed forces. Three years previously Stalin had rejected the plan of the Red Army Staff to increase the number of servicemen to 1,100,000, on the grounds that 'the mechanisation of the army in every country leads to a reduction in its manpower'.²⁷ But the new decision planned an

²² See Watson (2005), 150.

²³ The state budget increased from 55,455 to 65,500 million rubles (12 per cent), and the defence budget from 5,393 to 7,492 million. Of the increase of 2,099 million rubles, 1,527 million was allocated to maintenance (see Harrison and Davies (1997), 380).

²⁴ See Harrison and Davies (1997), 380.

²⁵ APRF 3/39/45, 3–9 (memorandum from Grin'ko to Stalin, January 3, 1935). These figures define defence very widely: they include the NKVD armies, the militia and the Committee of Reserves, and defence investment in the armaments industries and in civilian industry. Investment in Narkomoborony as such was planned to increase from 5.355 to 7.092 million rubles, or by 39.9 per cent.

²⁶ RGASPI, 17/162/17, 156–157 (art. 183); 195 million rubles was allocated from the Sovnarkom reserve, and 120 million rubles by reducing the allocations to other commissariats.

²⁷ SKP, 224 (Stalin to Kaganovich and Molotov, July 15 or earlier, 1932, written following his meeting with Voroshilov).

increase from 975,000 at the beginning of 1935 to 1,513,000 on January 1, 1938.²⁸ Three months later, the Politburo decided that the number conscripted in 1935 should be increased from the 813,000 available from the 1913 contingent to 990,000, by recruiting 177,000 from those born in 1914.²⁹ In future years, the age for call up would be gradually lowered from 21 to 19; in each year half of the contingent from the following year was to be recruited.³⁰

In 1935 serious efforts were made to enhance the prestige of the Red Army, especially its officers, and to strengthen army discipline. In 1934, following the renaming of Narkomvoendel (see p. 77 above), a new Statute for the renamed Narkomoborony was intensively discussed behind the scenes. The Statute stressed the unified management of the army, navy and air force, and replaced the long-established Revolutionary Military Council by an appointed Military Council attached to the commissariat.³¹ Nine months later, in August 1935, officers' pay was substantially increased.³² In the following months further Statutes established standard military ranks, with provisions on the military education and length of service required for each rank.³³ The hierarchy included the new supreme rank of Marshal of the Soviet Union. It replaced the former revolutionary command structure, and had many points of resemblance with the Tsarist army. Simultaneously, what was previously known as the 'Staff' (Shtab) of the Red Army acquired the pre-revolutionary name 'General Staff'.³⁴ A decree of TsIK and Sovnarkom dated November 20 appointed five Marshals, naming their functions: Voroshilov, Tukhachevsky (his deputy), Egorov (head of the General Staff), Budennyi (inspector of cavalry) and Blyukher (commander of the Far Eastern Army).³⁵

²⁸ RGASPI, 17/162/18, 20, 35–37 (art. 102).

²⁹ RGASPI, 17/162/18, 107 (art. 91).

³⁰ RGASPI, 17/162/18, 123 (art. 356, dated August 28).

³¹ SZ, 1934, arts. 430 a–c, 431 (decrees of TsIK and Sovnarkom, dated November 22, 1934); for the correspondence on the Statute in August 1934 between Stalin and Kaganovich, see SKP, 445, 446, 449, and 450, note 5.

³² RGASPI, 17/162/18, 102–4 (art. 32, dated August 2). The pay of the lowest rank was increased from 270 to 350 rubles a month (30 per cent), and of the highest rank from 670 to 1,000 rubles (49 per cent). Bonuses were to be paid for service of two years and above, rising from 5 per cent of basic pay to 25 per cent for 20 years' service.

³³ SZ, 1935, arts. 468, 469 (decrees of TsIK and Sovnarkom, dated September 22).

³⁴ SZ, 1935, art. 426 (dated September 22).

³⁵ I, November 21, 1935.

These measures to strengthen and expand Soviet defence were accompanied by repressive actions designed to secure a reliable population in the frontier zones in the event of war, affecting the whole of the Western frontier. On December 27, 1934, a full session of the Politburo resolved that '7 – 8,000 households from the unreliable element' should be resettled from the Western frontier districts of Ukraine to its Eastern borders; in addition the NKVD should exile 2,000 anti-Soviet families from the frontier districts.³⁶ By March 1935, some 42,000 people had been moved.³⁷ Then on March 15 the Politburo approved 'Measures to Strengthen the Frontiers of Leningrad Region and Karelia'. All the 'unreliable element' were to be exiled from the frontier districts to Kazakhstan and West Siberia, and a 'forbidden zone' was to be established, 100 km deep on the Western frontier and 60 km deep in Murmansk and Siberia. Those who entered the zone without permission were to be sentenced to 1–3 years' compulsory labour.³⁸ On June 12 the Politburo adopted similar 'Measures to Strengthen the Belorussian Frontier', including the establishment of a forbidden zone and special frontier districts. In Belorussia 2,000 families from the 'unreliable element' were to be exiled beyond the boundaries of the republic and 2,000 'reliable' families were to replace them.³⁹ The final decision in this group of measures was a published decree of TsIK and Sovnarkom dated July 17, requiring that permission should be obtained from the NKVD to enter the frontier areas.⁴⁰

Milder measures to control the movement of the population covered the whole USSR. On September 21 a joint decree of Sovnarkom and the party central committee complained that the population had been poorly registered until the civil register offices (ZAGsy) had been taken over by the NKVD in the previous year. The authors of the decree were evidently alarmed that the registered population was far lower than in previous plans and estimates; this would be confirmed by the ill-fated population census of 1937. The decree claimed that the inefficiency of the ZAGsy had been utilised by the 'class enemy'

³⁶ RGASPI, 17/162/17 (item XIV on the agenda). A later decision gave special privileges to 4,000 families from Chernigov and Kiev which were being resettled in the frontier districts (RGASPI, 17/162/17, 125–126 – art. 159, dated January 2).

³⁷ See Khlevniuk (2004), 89.

³⁸ RGASPI, 17/162/17, 149–151 (art. 103). These later decisions were approved by poll.

³⁹ RGASPI, 17/162/18, 57 (art. 61).

⁴⁰ SZ 1935, art. 377.

to conceal the growth of the population by under-registering births and 'exaggerating the death rate by registering the death of the same person several times'. From January 1, 1936, formal birth certificates were to be introduced, and these must be presented when entering educational establishments, or when called up for military service. The body of the decree was published, but a secret clause required regional party committees to check all officials concerned with population statistics and remove class-alien and poorly-trained personnel.⁴¹ Further decrees ruled that foreigners should be required to register in every town they visited within 24 hours, and transferred the foreign departments of soviet executive committees to the NKVD.⁴² The requirement that foreigners should register in each town they visited still operates at the present day.

The first repressions after the murder of Kirov were followed in 1935 by a much more extensive campaign against former members of oppositions within the party and former members of other parties, and against so-called 'former people', who had been better-off or held office under the old regime. In mid-January, in secret trials of the 'Leningrad counter-revolutionary Zinovievite group' and the 'Moscow centre', leading former members of the 'New Opposition' of 1925 were sentenced to imprisonment or exile, including Zinoviev and Kamenev.⁴³ On January 18 the old Bolshevik Lominadze, threatened by these events, committed suicide.⁴⁴ On the same day the party central committee circulated a secret letter to local party organisations. This claimed under the heading 'Facts' (*fakty*) that the Zinoviev group must be crushed, because they used their party membership to facilitate a 'counter-revolutionary terrorism' which was essentially the same as that practised by 'White Guard saboteurs'. The letter also insisted that the revolutionary vigilance of party members must be improved and intensified, especially by studying every anti-party group and their behaviour.⁴⁵ During the next few months hundreds of ex-oppositionists, and many thousands of

⁴¹ SZ, 1935, art. 432. For the secret clause, see GARF, 5446/1/483, 67.

⁴² GARF, 5446/1/483 (art. 2076/345s, dated September 15); 5446/1/ 89 (art. 2236/366s, dated October 4). Registration in villages should take place within 48 hours of arrival.

⁴³ See Khlevnyuk (1996), 142.

⁴⁴ See *ibid.* 48–55. For Lominadze's role in the 'Syrtsov–Lominadze affair' see vol. 3, pp. 375–7. At the time of his suicide he was party secretary in the Magnitogorsk factory.

⁴⁵ *Izvestiya TsK*, 8, 1989, 85–115.

'former people', were expelled from the larger towns. During March, 11,702 former people, including 1,434 members of the nobility, were removed from Leningrad.⁴⁶ In the same month Shlyapnikov and other members of the 'Workers' Opposition' of 1921 were sentenced.⁴⁷ A long list was issued of publications by former oppositionists to be removed from general libraries.⁴⁸ The rights and the influence of former oppositionists and former members of other revolutionary parties were greatly restricted by the abolition of the Society of Old Bolsheviks and the Society of Former Political Prisoners and Exiles.⁴⁹

The 'Kremlin affair' neatly combined the campaigns against ex-oppositionists and former people. The librarians, cleaners and other members of staff of TsIK included both former people and relatives of Kamenev, including his brother. They had evidently gossiped about Stalin and his policies, and relentless questioning built this up into a case that they intended to murder Stalin. Yenukidze, secretary of TsIK, was responsible for its staff. In March he was removed from his post.⁵⁰ In May, in a secret trial, 108 persons were sentenced to various terms of imprisonment and exile; two were sentenced to death.⁵¹ In June, Yenukidze was expelled from the party and publicly condemned for 'moral and political degeneracy'.⁵²

⁴⁶ Communication from Zakovskii to Yagoda, March 31, 1935, published in *Lubyanka*, i (2003), 654–7. Later in the year it was even proposed to exile 20,000 people from the resort town of Kislovodsk, where party leaders often took their holidays (Petrovskii to Kalinin, July 22, 1935, published in *Sovetskoe rukovodstvo* (1999), 308–9).

⁴⁷ Khlevnyuk (1996), 144.

⁴⁸ RGASPI, 17/3/965, 63–64 (dated June 16). A parallel decision on the same day condemned the 'wholesale "purge" of libraries' which had been taking place indiscriminately (RGASPI, 17/3/965, 30).

⁴⁹ The former decision, approved by the Politburo on May 25 (RGASPI, 17/3/924) was published by the party central committee in *Pravda* on the same date; for the latter see SZ, 1935, art. 299 (decree of TsIK, dated June 25).

⁵⁰ SZ, 1935, ii, art. 30, dated March 3.

⁵¹ Extensive documents, including records of the questioning of the accused, are published in *Lubyanka*, i (2003), 699–612, 618–19, 626–50, 658–60, 663–70. Stalin's numerous pencil notes on these documents show that he followed and influenced these events in some detail. See also *Izvestiya TsK*, 7, 1989, 65–93 and Getty and Naumov (1999), 161–79, for the discussion at the June 1935 central committee plenum and its decision of June 7.

⁵² P, June 8, 1935.

Yenukidze was replaced in March by Akulov, who relinquished his post as Procurator of the USSR to his deputy Vyshinsky.⁵³ (See also p. 112 below.) In May, while these events were proceeding, a wide-ranging party purge was launched, innocuously described as a 'check-up (*proverka*) of party documents'. It was conducted by the party control commission headed by Yezhov. In December Yezhov reported to the party central committee plenum that 15,218 'enemies' had been arrested, and over a hundred 'enemy organisations and groups' had been exposed; 177,000 party members had been expelled.⁵⁴ The purge involved much closer collaboration with the NKVD than in previous purges.⁵⁵ Further steps to strengthen the NKVD in 1935 included the adoption of ranks parallel to those in the Red Army for the State Security Service of the NKVD.⁵⁶ The functions of the NKVD were also expanded by the transfer to it of the Central Administration of Main and Hard Roads and Automobile Transport; its functions included the management of the compulsory road work carried out by peasants for some days in each year.⁵⁷

The attempt to impose discipline extended to social as well as political order. In March Voroshilov wrote to Stalin, Molotov and Kalinin drawing attention to the growth of hooliganism and banditry in Moscow, and calling for the 'cleansing of Moscow from homeless and criminal children'; he proposed that this should be organised by the NKVD, which under Dzerzhinsky had gained a positive reputation for its handling of the waifs and strays of the 1920s.⁵⁸ In the following month a decree of TsIK and Sovnarkom ruled that adolescents aged 12 and over committing criminal acts from theft to murder should be subject to all the punishments provided by criminal law.⁵⁹ A secret Politburo circular explained that

⁵³ SZ, 1935, ii, arts. 31–2, also dated March 3.

⁵⁴ See Khlevnyuk (1996), 147–8; Getty and Naumov (1999), 197–211. In June 1936 Yezhov reported to the party plenum that 'over 200 thousand' members had been expelled during the check-up (Getty and Naumov (1999), 236). Yezhov had been appointed chair of the party control commission and a secretary of the party central committee following Kaganovich's appointment as People's Commissar for Transport on February 28 (see p. 215 below).

⁵⁵ See Khlevnyuk (1996), 147.

⁵⁶ SZ, 1935, art. 420, dated September 20; for the army ranks, see p. 96 above.

⁵⁷ SZ, 1935, art. 452 (decree of TsIK and Sovnarkom, dated October 28); for peasant labour obligations, see vol. 5, pp. 396–7.

⁵⁸ *Stalinskoe Politbyuro* (1995), 144–5.

⁵⁹ SZ, 1935, art. 155 (dated April 7). A further decree provided that homeless children (as distinct from criminals) should be sent to children's homes or back to

‘measures ... include the highest measure of criminal punishment (shooting)’.⁶⁰ The death penalty had previously been restricted to those aged 18 and over. During 1935 some 160,000 homeless and neglected children were apprehended: 82,000 were sent to NKVD reception centres and 10,000 were arrested.⁶¹

In spite of these developments, the more moderate policy associated with Akulov continued to operate in important respects. The number of arrests by the security agencies remained about the same as in the previous year. Arrests by the NKVD fell from 205,173 in 1934 to 193,083 in 1935. The sentences carried out by the security agencies themselves continued to decline in accordance with the policy of transferring sentences to the normal courts, falling from 87,569 to 43,665. However, the number of sentences imposed by other agencies on cases initiated by the security agencies increased substantially, from 113,629 to 267,064, and the total number of sentences to deprivation of freedom by confinement in camps and colonies increased from 284,880 in 1934 to 356,725 in 1935 (figures for the RSFSR only), as part of the effort to impose social discipline. However, this was still well below the 1933 level. The total number of executions fell from over 2,000 to 1,229.⁶²

The total number of special settlers on January 1, 1936, amounted to 1,017,133, an increase of 43,000 in the course of the year. This increase was partly due to the decline in the number of deaths by 18,000 and an increase in the number of births by 12,000, both due to the improved conditions in the settlements; the number of escapes also declined.⁶³ During the year the civil rights of a substantial number of special settlers were restored, including the right to hold an internal passport, but they were firmly forbidden to leave their settlement on the grounds that their return to their original place of residence would violate the policy of developing poorly-inhabited areas and would be ‘politically undesirable’.⁶⁴

their parents (SZ, 1935, art. 252, dated May 31).

⁶⁰ RGASPI, 17/2/162, 32, dated April 20. It is not known whether any youths aged 12–17 were actually sentenced to death.

⁶¹ See Khlevniuk (2004), 127.

⁶² See sources cited in Chapter 10, p. 286.

⁶³ See Table 24 and also SI, 11, 1990, 6 (Zemskov).

⁶⁴ See Yagoda’s circular of January 5 and letter to Stalin of January 17, 1935 (*Istoriya Stalinskogo Gulaga*, v (2004), 209–10), and the TsIK decree of January 25 (*ibid.* 734).

During the year the NKVD attempted to normalise the position of the special settlements. It proposed to Sovnarkom that they should be transferred from the NKVD to the union republics, and in July Sovnarkom of the RSFSR agreed that those settlements established by the end of 1932 should be transferred, but argued that the later settlements established in 1933–35 should not be transferred because the investment required would be too burdensome for the republican budgets.⁶⁵ A commission was established under the Sovnarkom of the USSR, headed by D. Z. Lebed', vice-chair of the RSFSR Sovnarkom. It issued a report on August 15, 1935, agreeing that 1,797 settlements with a population of 459,675 should be transferred to the republics and regions, over 40 per cent of the total population of the special settlements. It also agreed on arrangements for the transfer to the republics and regions of finance, equipment and staff (including the couple of thousand commanders of the settlements, and nearly 10,000 medical and teaching personnel). In November these proposals were confirmed by a further commission of Sovnarkom USSR headed by Rudzutak,⁶⁶ but like the economic reforms proposed in 1935 (see pp. 248–54 below), these measures were not put into effect.

The more moderate and flexible policies characteristic of 1934 continued in other respects. The VII Congress of Soviets, the first since March 1931, assembled in Moscow from January 28 to February 6, and resolved to make important changes in the Constitution of the USSR. The existing Constitution had undergone many modifications since its adoption in 1918. But it retained unequal franchise for citizens of town and countryside, and the election of each higher level of soviets not directly by the voters but by the lower level of the soviets. In contrast, elections were henceforth to be conducted on the principles of equal franchise, direct election of all levels of the soviet hierarchy, and a secret not open ballot. This was claimed to be a more democratic Constitution, corresponding to the preponderance of socialist society in the USSR. Immediately following the congress, TsIK appointed a Constitutional commission. Of course, all elections continued to be controlled in detail by the Communist party; the Soviet Union was in no sense a parliamentary

⁶⁵ *Polityuro i krest'yanstvo*, ii (2006), 329.

⁶⁶ For these proceedings see *ibid.* 329–34.

democracy.⁶⁷ But there is no doubt that this move was intended as a gesture of reconciliation to the peasants; a peasant vote previously carried only one-fifth of the weight of an urban vote. It was also intended to appeal to the Western democracies. In an unpublished note to the Politburo Stalin wrote that 'the situation and the balance of social forces in our country is such that we can only gain politically from this'; moreover, 'such a reform is bound to act as a most powerful weapon against international fascism'.⁶⁸

Following the Congress of soviets, the Second All-Union Congress of Collective Farmers met in Moscow from February 11 to 19, and adopted a Model Statute of the Agricultural Artel.⁶⁹ The Statute provided a measure of stability for the structure of the kolkhoz and especially for the household plot of the collective farmer; and in practice the household plots were by and large left to thrive for the next four years.

These gestures to the peasants were reinforced on July 29 by a decree authorising an amnesty for collective farmers who had been sentenced to five years' deprivation of liberty or less, and had completed their sentence or been released early, providing that they were now working 'conscientiously and honestly' for the kolkhoz.⁷⁰ By March 1, 1936, 557,000 collective farmers had been amnestied.⁷¹ In addition, following a decree of August 10, 54,000 officials previously sentenced for 'sabotage' of the grain collections or for circulating substitutes for money were freed.⁷²

A more generally applicable decree of Sovnarkom and the party central committee, dated June 17, marked – albeit temporarily – a significant step towards 'socialist legality'. It insisted that the NKVD could arrest a person only if the appropriate procurator agreed; moreover, arrests of leading officials and specialists must be sanctioned

⁶⁷ The decisions to revise the Constitution and to establish a Constitutional commission were first adopted by the Politburo on January 30 on a proposal by Stalin.

⁶⁸ Cited from the archives in Khlevnyuk (1996), 157.

⁶⁹ The Statute was approved by a decree of Sovnarkom and the party central committee (SZ, 1935, art. 82, dated February 17). It is discussed further below, pp. 154–5.

⁷⁰ SZ, 1935, art. 327 (decree of TsIK and Sovnarkom).

⁷¹ See Khlevnyuk (1996), 149–50. The effect of the decree was weakened by a prior decision of TsIK that 'restitution of exiled kulaks to civil rights does not give them the right to leave their settlements' (SZ, 1935, art. 57).

⁷² See Khlevnyuk (1996), 150; RGASPI, 17/3/970, 144–145; the figure is for the period up to the beginning of December 1935.

by the People's Commissariat where they were employed and by the appropriate party secretary.⁷³

Stalin's intention that this decision was to be taken seriously is demonstrated by his handling of the Luk'yanov affair. In August S. S. Luk'yanov, the non-party editor of the French-language *Journal de Moscou*, published by Narkomindel, was arrested by the NKVD on the authority of Agranov, on the grounds that he had allowed doubtful anti-Soviet elements, possibly including spies, to associate with the journal. The arrest was supported by Kaganovich and Yezhov, but opposed by Narkomindel with the backing of Voroshilov. Stalin immediately wrote to Kaganovich: 'NKVD did not have the right to arrest [Luk'yanov] without the authority of the C[entral] C[ommittee]', and the Politburo reproved Agranov accordingly. But Stalin did not resist the dismissal of Luk'yanov, so the incident may merely demonstrate his wish to affirm his personal control over the NKVD.⁷⁴

Meanwhile, in July Zhdanov was sent to Saratov to report on the activities of the Saratov party committee, and issued a sharp criticism of the committee for using repression and administrative methods against rank-and-file party members rather than education and persuasion, and for imposing a military discipline which meant that members were afraid to speak up.⁷⁵

Further measures improved the rights of specialists and their families. On December 23, Sovnarkom approved a circular prepared by Vyshinsky on behalf of the Procuracy and Yagoda on behalf of the NKVD authorising the employment in their field of expertise of specialists and skilled workers who had been exiled, and their children were henceforth permitted to enter higher education establishments.⁷⁶ A few days later, a further decree adopted new rules for entrance into higher education establishments and technical colleges (*tekhnikumy*). Henceforth all limitations on entry (i.e. quotas) which

⁷³ Khlevnyuk (1996), 148–9.

⁷⁴ See SKP, 530–1, 537–9, 542–3. Kaganovich approved the reproof to Agranov, but on the 'substance of the issue' wrote to Stalin: 'permit me to defend the position I have taken in this matter' – the closest he came to a disagreement with Stalin. Stalin in turn blamed Narkomindel for inadequate guidance of the journal, and suggested that Bukharin and Radek should be made responsible for it.

⁷⁵ See Priestland (2007), 316–17.

⁷⁶ GARE, 5446/502/38, 190.

were due to the social origin of the student or to other restrictions placed on them were abolished.⁷⁷

On December 15, a lengthy decree from TsIK strongly criticised the handling of complaints from the population, using evidence from a survey of four regions. It demanded that complaints should be taken much more seriously, placing personal responsibility for the proper handling of complaints on the heads of soviet executive committees at various levels.⁷⁸

These developments were part of a general effort by the regime to persuade wider sections of the population to identify themselves with the Soviet system. On the occasion of Red Army day, Stalin, as part of the drive to secure support from the traditionally anti-Soviet Cossacks, sent a message of greetings to the First Cavalry Army.⁷⁹ On May 2, Stalin, at a reception for participants in the May Day parade, raised his glass to 'non-party Bolsheviks'; 'such people, comrades, such militants, are often more worthy than many party members'.⁸⁰ Three days later, at a reception for Red Army graduates, claiming that 'we have already outlived the period of a famine in technology', he declared that henceforth 'cadres decide everything'. Leading personnel must take care of their staff, 'both "small" and "big"', and abandon a 'soulless bureaucratic attitude' to them.⁸¹ Later in the year, at the conference of Stakhanovites – described in the press as 'a congress of party and non-party Bolsheviks' – he proclaimed:

Life has become better, comrades. Life has become more joyful. And when life is more joyful, the work goes faster.⁸²

The background to such appeals was the continued improvement in the standard of living. A secret TsUNKhU report concluded that

⁷⁷ SZ, 1936, art. 2, dated December 29, 1935. In 1934 (see pp. 19–20 above) such students were permitted to enter higher education establishments, but were subject to a quota.

⁷⁸ SZ, 1936, art. 174, published belatedly in the issue of June 16, 1936. A provision which was almost completely ignored in practice was that complaints must not be sent back to the person complained about.

⁷⁹ Stalin, *Soch.*, xiv (Stanford, 1967), 55, P, February 4, 1935. he also sent greetings to the First Cavalry Division on June 18 (*Soch.*, xiv (Stanford, 1967), 70, P, June 8, 1935).

⁸⁰ I, May 4, 1935.

⁸¹ P, May 6, 1935.

⁸² Stalin, *Soch.*, xiv (Stanford, 1967), 322.

in January–June 1935 ‘the abolition of bread rationing enabled a general improvement in the position of workers’ families’. Prices paid by them for food increased by 28.2 per cent, but the increase in income per head enabled food consumption to increase by 5.2 per cent, and by 11.1 per cent if the increased production of their personal allotments were taken into account. The report noted that prices increased much more rapidly in regions where bread rations had been more substantial and available to a higher proportion of the population. As a result – and contrary to the general trend of previous years – food consumption declined by 2–3 per cent in Moscow but increased by as much as 50 per cent in the Ivanovo region.⁸³ In 1935 as a whole, as in the previous year, food consumption by manual workers and engineering and technical staff increased substantially.⁸⁴ Food consumption by collective farmers also increased: the confidential report on family budgets of collective farmers for January 1936 claimed that in July–December 1935 their food consumption per head was 7 per cent higher than in the same period of the previous year.⁸⁵ The availability of woollen textiles and footwear also increased, owing to the improvement in the livestock situation. But as a result of the poor cotton harvest in 1934, the consumption of cotton textiles and clothing declined for both manual workers and engineering and technical staff. The production of consumer durables increased rapidly. These included bicycles, radios, gramophones, sewing machines, clocks and watches, and electric light bulbs. Except for light bulbs and watches, these were produced in hundreds of thousands rather than millions, and they were therefore available to only a small minority of the population. (See Tables 6 and 7.)

In 1935 investment in social and cultural services (i.e. education, health, housing and municipal economy) also increased rapidly, by 28.2 per cent as compared with the increase in total investment by 15.9 per cent (see Table 8). Investment in education rose by as much as 65.2 per cent, following the school building programme announced in 1934 (see p. 19 above). Some 533 urban schools were completed

⁸³ RGAE, 1562/329/62, 89–94, dated September 29, 1935.

⁸⁴ Consumption of vegetables declined, owing to the poor harvest. Workers’ consumption of sugar and confectionery also declined. Annual figures for white-collar workers have not been traced.

⁸⁵ RGAE, 1562/80/1, Byudzhety kolkhoznikov, January 1936, Table 1, reported an increase in protein by 6.7 per cent, in both fats and carbohydrates by 7.5 per cent and in calories by 7.4 per cent.

as compared with 160 in 1934, and the number of small rural schools also substantially increased.⁸⁶ Sovnarkom ambitiously announced that these developments should enable the abolition of the third shift in schools in 1935/36 and of the second shift in 1937/38.⁸⁷ More prosaically, a further decree instructed district soviets to eliminate the arrears in teachers' pay.⁸⁸ Further decrees provided for increased production and improved quality of school textbooks and pencils, pens, exercise books and other school equipment. In future, textbooks and school equipment should be available on free sale in state shops rather than sold through the schools.⁸⁹ In 1935/36 the number of students in higher education and technical colleges and the number of pupils in the top three forms of secondary schools increased rapidly.

Investment in the health services expanded at a much slower rate, but substantial sums were allocated in the state budget for increased pay for medical staff, and the number of doctors, nurses and other medical staff increased more rapidly than the number of manual and office workers as a whole.⁹⁰ The 1936 plan claimed with some justification that these changes provided a sound basis for future development.⁹¹

In contrast, Gosplan bluntly stated that the results of the housing programme in 1935 were 'completely unsatisfactory'; only 60 per cent of the plan for new accommodation had been completed.⁹² While investment in urban housing increased by as much as 33 per cent in 1935, the amount of new housing completed was 25 per cent less than in 1934 (see Table 11). This seems to have been primarily

⁸⁶ *Narodno-khozyaistvennyi plan 1936* (1936), 348–9.

⁸⁷ SZ, 1935, art. 162, dated February 22.

⁸⁸ SZ, 1935, art. 201, dated May 4.

⁸⁹ SZ, 1935, art. 360, dated August 9, art. 411, dated September 14. See also *Narodno-khozyaistvennyi plan 1936* (1936), 348.

⁹⁰ SZ 1935, art. 92, dated March 4; *Narodno-khozyaistvennyi plan 1936* (1936), 457, 459, 461.

⁹¹ *Narodno-khozyaistvennyi plan 1936* (1936), 299.

⁹² *Narodno-khozyaistvennyi plan 1936* (1936), 504–5. A distinguished group of British local government experts who visited Moscow in 1936 concluded that the lag in the growth of housing behind the growth of the urban population was a major failure of the regime. One of them (Jewkes) calculated that for the cost of the Moscow Metro 470,000 people could have been provided with eight square metres of housing per head, but another (Sir Ernest Simon) commented about the Metro that 'the whole of Russia feels proud of it' (Simon *et al.* (1937), 90–1, 204–5). The present area of urban housing per head was 4.5 square metres.

the result of the continuing rise in the cost of house building, which reached 324 rubles per square metre in 1935 as compared with the 185 rubles anticipated when the five-year plan was compiled in 1932–33.⁹³

Major projects were started or continued which appealed to Soviet patriotism and enhanced Soviet international prestige; they centred on Moscow as the capital of the Soviet Union and of world communism. On May Day Chkalov flew the I-16 fighter over Red Square, and on May 5 both the designer and the pilot were awarded the Order of Lenin. At the reception Stalin was reported to have said to Chkalov 'Your life is more valuable than any machine.'⁹⁴ Then on May 15 the first line of the Moscow Metro was opened amid triumphant publicity.⁹⁵ Following the visit of the architectural and technical commission of the Palace of Soviets to Europe and the United States, elaborate decrees provided that construction should begin in 1935. United States' expertise would be extensively involved in planning the steel frame, building materials, lifts and escalators, acoustics, air conditioning and even food preparation. A rotating team of two Soviet architects or engineers would be located in New York for the duration of the project.⁹⁶ The main hall of the palace would seat 20,000 people, and the buffet would be capable of serving 3,000 people simultaneously.⁹⁷

The climax of these plans for Moscow came with the public announcement on July 10, shortly before the Comintern congress, of the ten-year 'General Plan for the Construction of Moscow'. After much dispute, the plan retained the main features of Moscow's historic centre, but with a major re-routing of the roads.⁹⁸ In September, a further decree praised the substantial work which had already been undertaken on the Moscow–Volga canal, and authorised its extension and deepening. The canal, which was being built by the NKVD with the extensive use of forced labour, was to be completed by April 1937. The total cost of construction would amount to the huge sum

⁹³ RGAE, 1562/1/1039, 79 (n.d.[1939?]).

⁹⁴ P, May 4, 6, 1935; Chkalova (2004), 116–18.

⁹⁵ P, May 15, 16, 1935.

⁹⁶ GARF, 5446/1/481, 7–14, dated April 26. \$7 million were allocated for US technical assistance (RGASPI, 17/162/18, 114, dated July 17).

⁹⁷ GARF, 5446/1/482, 47–50 (art. 1475/230s, dated June 29).

⁹⁸ SZ, 1935, art. 306, decree of Sovnarkom and the party central committee. An English translation of this long decree was published in *Moscow: General Plan for the Reconstruction of the City* (1935), and in Simon *et al.* (1937).

of 1,400 million rubles; and a supplementary allocation of funds was made available in 1935.⁹⁹ The finishing touch for the Moscow enterprise was the decision to remove the Imperial eagles from the Kremlin towers and replace them with five-pointed Soviet stars; 68 kilograms of gold were allocated for this purpose.¹⁰⁰

The prestige projects were not confined to Moscow. In July, the competence of the State Administration for the Northern Sea route was extended by adding to its functions the provision of economic and cultural services to the peoples of the Far North; the existing Committee to Assist the Far North was abolished.¹⁰¹ Its grant from the state budget was considerably increased, but expenditure on the Northern Sea Route was far less than on the Moscow–Volga canal.¹⁰² In the Union republics, most publicity was afforded, following the disasters of 1931–33 (see vol. 5, pp. 321–5, 408–9), to the future plans of the Kazakh ASSR, announced on the occasion of the fifteenth anniversary of the foundation of the republic; the plans placed special emphasis on education and rural health.¹⁰³

Soviet achievements were celebrated in a variety of well-publicised ways. Stalin, together with other members of the Politburo, travelled in the new Moscow Metro and visited the first stages of the Moscow–Volga canal.¹⁰⁴ A team of young soldiers attached to Narkomut rode Soviet-manufactured bicycles on a 9,000 kilometre route from Khabarovsk in Siberia to Moscow in the record time of 57 days.¹⁰⁵ More traditionally, cavalymen completed a ride through

⁹⁹ SZ, 1935, art. 395 (decree of Sovnarkom and the party central committee, dated September 8); Stalin authorised the publication of the decree (SKP 557, n. 1, dated September 8), which appeared in *Pravda* on September 9.

¹⁰⁰ GARF, 5446/1/483, 19, dated September 17, and 74, art. 2149/359ss, dated September 23.

¹⁰¹ SZ, 1935, art. 338, dated July 21.

¹⁰² See Table 8. In 1935–37 investment in the Northern Sea Route amounted to 364 million rubles, but investment in the Moscow–Volga canal amounted to 425 million rubles in 1937 alone (see Table 8 and, for the 1937 expenditure, RGAE, 1562/10/502a, 27 (n.d. [1938?])).

¹⁰³ SZ, 1935, art. 458, dated October 25. The celebration of the occasion was delayed from September to October 24 on the proposal of Mirzoyan, the party secretary (SKP, 540, Kaganovich to Stalin, dated August 29, and Stalin's reply in n. 3).

¹⁰⁴ P, April 29, June 5, 1935.

¹⁰⁵ See RGASPI, 17/3/971, 4, dated August 31, 1936, and SKP, 542, where Kaganovich claimed to Stalin that the journey was made 'without breakdowns and accidents'.

Central Asia and the North Caucasus from Askhabad to Moscow.¹⁰⁶ A disaster was turned to patriotic advantage following the precedent of the rescue of the stranded crew of the *Chelyuskin* (see p. 20 above). The prestigious 77-seater metal civil aircraft *Maksim Gorky*, at that time the largest in the world, crashed on May 18, 1935, after colliding with an accompanying fighter plane. In July Sovnarkom announced the collection of voluntary contributions to enable the construction of sixteen new *Maksim Gorky* airliners; the planes were to be named after the present members of the Politburo plus Frunze, Lenin, Kuibyshev, Dzerzhinsky and Kirov.¹⁰⁷ But only one passenger aircraft of this type was ever completed; the factory was transferred to the production of heavy bombers.¹⁰⁸

Official encouragement of a more relaxed attitude to everyday life continued in 1935. In April the government authorised the sale of the ingredients for the traditional Easter cake.¹⁰⁹ Following Gorky's support for folk culture at the Writers' Congress, folk songs and folk dances were popularised, and ballroom dancing also became fashionable.¹¹⁰ At the end of the year, the traditional Christmas tree was revived as a New Year tree, and on December 31, 1935, and January 1, 1936, new year festivities were firmly installed as a feature of the Soviet calendar.

For many of those living in the major towns who identified themselves with the regime this was a time of great hope. A mining student in Sverdlovsk, who became deputy minister for geology after the war, described in his diary how he went to performances of Beethoven and Gounod, saw *Boris Godunov*, *The Demon* and *Faust*, and enthusiastically studied Greek thought, the history of the arts, philosophy, dialectical materialism – and ballroom dancing. His last diary entry for 1935 read 'Life! I have triumphed!'¹¹¹ The 21-year old son of a dekulakised peasant, previously tormented by his dual position as a Soviet citizen and a 'class alien', concluded in the spring of 1935 that the new attitude to class meant that 'I've been made a citizen of the common family of the USSR', and when he was admitted to the Moscow

¹⁰⁶ RGASPI, 17/3/970, 68, dated August 26, 1935. For Stalin's greetings to this exploit, see *Soch.* xiv, 71.

¹⁰⁷ SZ, 1935, art. 308, dated July 5; EZh, July 8, 1935.

¹⁰⁸ *Samoletostroenie*, i (1992), 322–3, 375.

¹⁰⁹ See Tucker (1990), 325–6.

¹¹⁰ *Ibid.* 326–7; and see p. 290 below.

¹¹¹ Garros *et al.*, eds (1995), 257–82 (L. A. Potemkin's diary).

Medical Institute in the autumn, believed that he had entered 'a new stage ... of my being and consciousness'.¹¹²

But this was a year of trial and turmoil for many 'former people' and former party oppositionists. Even the 58-year-old founder of the Leningrad puppet theatre complained of her 'awful, degrading life': she and her 19-year-old son were frequently interrogated by the NKVD, and many of her friends and associates were peremptorily exiled to remote regions.¹¹³ Mandel'shtam, who had been exiled to Voronezh but for the moment spared by Stalin from a worse fate (see p. 17 above), was deprived of his personal pension.¹¹⁴

The experienced and talented group of senior officials responsible for managing the government departments concerned with the economy remained unchanged in 1935 – with two important exceptions. Kaganovich, while retaining some of his party functions, including acting as deputy to Stalin when Stalin was on vacation, joined them in direct management of the economy with his appointment on February 28 as People's Commissar for Transport.¹¹⁵ Osinsky was removed from his post of director of TsUNKhU. Since his appointment in January 1932 as its first director (see vol. 3, pp. 201–2), he had done a great deal to restore the collection and publication of more reliable statistics about the economy. But he and his associates in TsUNKhU had been frequently criticised and badgered, most notably in the winter of 1932–33 (see vol. 5, pp. 134–5, and vol. 4, pp. 262–3, 338–40). In 1934 he was viciously attacked by *Pravda*, on extremely slender grounds (see pp. 33–4 above). In March 1935 his son was arrested by the NKVD, accused of membership of a Trotskyist group; Osinsky immediately appealed to Stalin, who ordered his son's release on the same day.¹¹⁶ In the following month, however, Osinsky met Stalin, and informed him that 'I am absolutely unable to work in TsUNKhU any longer.' Stalin referred the matter to Molotov, to whom Osinsky wrote that 'I feel a constantly increasing insurmountable and profound repulsion' for work in TsUNKhU.¹¹⁷ On August 8

¹¹² Fitzpatrick, ed. (2000), 77–116, esp. pp. 87–90 (J. Hellbeck, citing the diary of S. Podlubnyi; for Podlubnyi's later disillusionment, see vol. 7).

¹¹³ See her diary in Garros *et al.*, eds (1995), 334–41.

¹¹⁴ GARF, 5446/1/481, 52 (art. 873/129s, dated May 11, 1935).

¹¹⁵ SZ, 1935, ii, art. 29; for transport see pp. 214–19 below.

¹¹⁶ *Lubyanka*, i (2003), 650–1.

¹¹⁷ *Sovetskoe rukovodstvo* (1999), 206–7 (letter to Molotov, dated May 15, 1935). According to Stalin's appointments diary, Osinsky met Stalin for 35 minutes on

he was replaced by Kraval', a tough Stalin operator, who had been put in to TsUNKhU as Osinsky's deputy after the 1932–33 crisis.¹¹⁸

In the Politburo itself, Kuibyshev, who died on January 25, and Kirov were replaced by Mikoyan and Chubar'; these were normal promotions from their position as candidate members of the Politburo. Chubar', a competent administrator, and already a deputy chair of Sovnarkom, replaced Kuibyshev as head of the Committee of Reserves.¹¹⁹ By accident and design, other changes in the positions of leading personnel were more significant portends of the future. Following Kaganovich's transfer to Narkomput', he was replaced as head of the influential party control commission by his deputy Yezhov. Yezhov was also appointed as a secretary of the party central committee and head of its department of leading party agencies. Moreover, Yezhov became in effect the supervisor of the NKVD on behalf of the party.¹²⁰ Under Stalin's supervision, he organised the trials of the Zinovievites after the murder of Kirov; and in May he sent to Stalin the first chapter of his never-completed *From Factionalism to Counter-Revolution*, which, following the line taken by the central committee circular of January 18 (see p. 98 above) provided the ideological justification of treating the former oppositionists in the party as class enemies.¹²¹ In 1935 Yezhov met Stalin in his office 32 times as compared with 17 in 1934, while Stalin's meetings with Yagoda declined from 51 to 36.¹²²

The other significant change resulted from Akulov's appointment as secretary of TsIK following the downfall of Yenukidze. Akulov, who had a reputation for moderation, was replaced as Procurator of the USSR by his deputy Vyshinsky.¹²³ For the moment, Vyshinsky continued Akulov's efforts to achieve a measure of control by the Procuracy over the activities of the NKVD.¹²⁴

April 10; no-one else was present.

¹¹⁸ For Kraval' see vol. 2, pp. 342–3, and vol. 3, pp. 339–40. Osinsky remained head of the State Committee for Measuring the Harvest until it was merged into TsUNKhU in March 1937.

¹¹⁹ SZ, 1935, ii, art. 65, dated April 28. Kuibyshev was replaced as head of the commission of state control by the colourless Antipov (SZ, 1935, ii, art. 61, dated April 27).

¹²⁰ See Khlevnyuk (1996), 161.

¹²¹ See Jansen and Petrov (2002), 29–30.

¹²² Khlevnyuk (1996), 290–1. Andreev, also reliably obedient to Stalin, took over the party Orgburo from Kaganovich.

¹²³ SZ, 1935, ii, arts. 31–2, dated March 3.

¹²⁴ See Khlevnyuk (2004), 293–4, 299–310 (memoranda of February 1936).

But his opportunistic malleability was well known, and from the summer of 1936 he was the principal scourge of the accused in the three major public trials.

The general effect of the changes in the party leadership was to somewhat dilute the influence of Stalin's closest associates and to strengthen the ease with which Stalin could take decisions on his own. The diminished influence of the Politburo was reflected in the decline in the number of its sittings from 46 in 1934 to 20 in 1935.¹²⁵ Simultaneously, the Stalin cult was greatly enhanced. In July and August 1935 *Pravda* published in eight instalments Beria's notorious falsified panegyric about Stalin's pre-revolutionary role, *On the History of Bolshevik Organisations in the Transcaucasus*; an editorial praised the work as an example to follow.¹²⁶ At this time the French communist writer Henri Barbusse completed an enthusiastic biography of Stalin, which was published in French and English.¹²⁷ Previous histories of the Soviet party were downgraded. On December 4, 1935, Yaroslavsky, who had completed a revised version of his very widely circulated party history, complained to Ordzhonikidze that this work, on which he had been engaged for ten years, '*is being buried*'.¹²⁸ Behind the scenes a new sycophantic attitude to Stalin appeared in a private letter from Kaganovich to Ordzhonikidze, praising the success of the grain collections as 'our completely unusual stunning victory – the victory of Stalinism'.¹²⁹

The growing threat of war during 1935 led to a sharp increase in some of the resources devoted to defence. Instead of the planned increase of 32 per cent, capital construction by Narkomoborony increased by as much as 65 per cent.¹³⁰ Expenditure on maintenance of the armed forces amounted to 4,762 million rubles instead of the 4,202 million originally planned.¹³¹ The main failure of the defence plan in 1935 was that expenditure on the purchase of armaments increased by only 14 per cent, far less than planned; the armaments industries had not achieved their ambitious plan (see pp. 203–11 below).

¹²⁵ See Khlevnyuk (1996); decisions not taken at the sessions were made by poll of the members, usually by telephone.

¹²⁶ P, July 29–August 5. August 10 (editorial). For these events, see Tucker (1990), 333–5.

¹²⁷ *Ibid.* 335.

¹²⁸ *Sovetskoe rukovodstvo* (1999), 320–1.

¹²⁹ *Stalinskoe Politbyuro* (1995), 146–7, dated September 4, 1935.

¹³⁰ See Harrison and Davies (1997), 380.

¹³¹ See Harrison and Davies (1997), 380.

CHAPTER FIVE

THE 1935 PLAN AND THE ABOLITION OF BREAD RATIONING

(A) THE INITIAL STAGE OF PREPARING THE 1935 PLAN, JULY–AUGUST 1934

‘The Targets (*limity*) for the National-Economic Plan of 1935’ were adopted five months before the beginning of the year, on July 29, 1934, as a decree of Sovnarkom.¹ This was far earlier than with previous annual plans, and the targets were set out in greater detail. This minor revolution in planning procedures was designed to enable government departments, republics, regions and enterprises to prepare their own annual plans, and submit their claims for materials and equipment, before the beginning of the new year.

In the now remote world of NEP, Sovnarkom decided on June 8, 1927, that in future it would approve the ‘numerical ceilings and main directives’ of the annual ‘control figures’ in sufficient time to enable Gosplan to disaggregate them to the commissariats and the republics by July 1.² This was three months before the economic year, which then began on October 1. It proved impossible to carry out even this more modest timetable in the later 1920s, years of profound disputes and rapid shifts in policy, or during the planning chaos of 1929–30. From the 1931 plan onwards, however, the Politburo and/or Sovnarkom adopted at least a handful of planning indicators a few weeks before the beginning of the year. The politics of planning was of course utterly different in the 1930s from the second half of the 1920s, when the preparation of the annual plans was conducted largely in public, and the main stages of the planning process, and the main disputes, were described in some detail in the press.³ In the 1930s, the draft plan continued to be discussed within Gosplan and between the key commissariats, but these discussions took place almost entirely in secret. For the 1934 plan, for example, the key investment and production figures were agreed

¹ GARF, 5446/1/89, 157–9 (art. 1803).

² See Carr and Davies (1969), 811.

³ See, for example, Carr and Davies (1969), chs 12 and 34.

privately in September 1933 between Kuibyshev (then head of Gosplan), Molotov and Stalin; and two months later the plan was not considered by a full meeting of the Politburo but adopted as a decision of a restricted Politburo session, which the full Politburo later approved by poll.⁴ Similarly the Sovnarkom decree on the 1935 plan was approved by a restricted Politburo meeting on the previous day, July 28; it was not formally endorsed by the full Politburo until August 5.⁵ All Politburo decisions were of course secret, and the July 29 Sovnarkom decree was classified ‘not for publication’.⁶

The decree of July 29 included production, investment and financial targets. The increase in production by the industrial commissariats was planned at 15 per cent and by the industrial cooperatives at 14 per cent. The railways would carry an average of 63,000 wagon-loads a day and receive an allocation of 650,000 tons of Grade 1 rails. The progress made in the first half of 1934 indicated that these were realistic targets. In the first six months of 1934 industrial production was over 17 per cent greater than in the same period of the previous year and by June 1934 57,000 railway wagons were loaded daily. The July 29 targets were supplemented on August 5 by a further Sovnarkom decree setting out plans for increases in labour productivity (output per worker) and for the production targets in physical terms for 24 major items of industrial output.⁷ These targets were also on the whole realistic.

The crucial figure in the decree of July 29, and the most controversial, was for capital investment. Its importance was emphasised by setting out, in an appendix table, 38 sub-allocations to commissariats and other government departments. Only 18,000 million rubles (in 1935 prices) were allocated, even though at this time the annual plan for investment in 1934 was 23,000 million rubles, and the second five-year plan, published only a couple of months previously, allocated 27,704 million rubles to investment in 1935 (also in 1935 prices).

⁴ RGASPI, 17/3/935, arts. 93/74 and 93/75, dated November 28, and article 104/85, dated November 29, 1933.

⁵ RGASPI, 17/3/949 (art. 17/139).

⁶ No record has been available of the prior informal top-level exchanges which undoubtedly took place about the basic ceilings in the July 29 decree.

⁷ GARF, 5446/1/89, 310–311 (art. 1836).

The very modest investment plan was closely associated with the attempt to achieve – or rather move in the direction of – the five-year plan decision to reduce average retail prices in the course of the five years by as much as 35 per cent. The effect of this large reduction would be that retail trade in 1937 would amount to 53,000 million rubles in current prices as compared with 81,575 million rubles when valued in 1933 prices – a reduction of over 28,000 million rubles.⁸ This would in turn require a quite unusual degree of financial restraint, including a reduction in industrial costs over the five years by 26 per cent, and of building costs by as much as 40 cent.⁹

During the first eighteen months of the five-year plan, however, costs had been reduced only slightly, and retail prices had increased. Against this background the decree of July 29 called for great financial stringency:

The budget and credit plans for 1935 shall be based on a plan not to issue additional currency (*bezemissionnyi plan*), and to form a reserve amounting to 2 thousand million rubles in the unified state budget.

In this spirit the decrees of July 29 and August 5 called for substantial cost reductions, beginning a belated move towards achieving the five-year plan requirement.¹⁰ The decree of July 29 also announced a severe restriction on the average wage per head in 1935 – it would remain at the level of the last three months of 1934.

The decree of July 29 also declared that in retail trade all additional supplies would be directed into commercial and rural trade (as distinct from trade in rationed goods), and that retail prices in commercial and rural trade would be reduced by 2,000–3,000 million rubles (for the term ‘commercial trade’, see pp. 9–10 above). This reduction would have been only a small step towards the reduction of prices by over 28,000 million rubles by 1937; the decree had silently abandoned the five-year plan for costs and prices. Before this decision was taken, the trade sector of Gosplan, in a memorandum

⁸ *Vtoroi* (1934), i, 530–1.

⁹ *VKP v rez.*, ii (1954) 762; *Vtoroi* (1934), i, 321. In consequence the cost of industrial production in 1937, measured in current 1937 prices, would be 13,000 million rubles less than the cost of the same output measured in 1932 prices.

¹⁰ The cost reduction in 1935 would be as follows (per cent): Narkomtyazhprom 6; Narkomlegprom 1; Narkompishcheprom 3; Narkomles 3.5 (excluding the timber collections); cost of pure building 15; cost of equipment used in investment 4.

of July 18, 1934, acknowledged that average retail prices, including the prices of rationed goods, would actually rise in 1934. Prices in commercial and rural trade would decline by only 1,300 million rubles, as compared with the 1934 plan of 2,000 million, and the increased price of rationed bread, introduced in the previous month (see pp. 54–5 above), would raise retail prices in the period June–December 1934 by 2,500 million rubles, resulting in a net price increase of 1,200 million. In the hope of making progress towards the five-year plan objective, the memorandum of July 18 optimistically proposed that retail prices should be reduced by as much as 7,000 million rubles in 1935, declining by 17 per cent in commercial and rural trade.¹¹ The decree of July 29 implicitly rejected this proposal as unrealistic.

The low capital investment figure came as a great shock to the various Gosplan departments and to the People's Commissariats. When the initial claims of the Gosplan departments were aggregated, they reached the extravagant total of 33,768 million rubles. Gosplan reduced this figure first to 26,537 million and then to 23,500 million rubles.¹² This was already quite a low figure, approximately the same as the current 1934 plan, and 15 per cent below the plan for 1935 in the five-year plan. Immediately after receiving the notification of their share of the lower planned investment of 18,000 million rubles, a mere 65 per cent of the five-year plan figure, the major Gosplan departments protested vigorously.

By far the largest item in the investment plan was of course the allocation to Narkomtyazhprom, amounting to 39 per cent of the total. The Narkomtyazhprom plan for 1935 set out in the decree of July 29 was 6,950 million rubles, 77 per cent of the five-year plan figure, and over 1,000 million rubles less than the 8,040 million rubles proposed by Gosplan. The extremely competent metallurgy department of Gosplan was very perturbed by the allocation to the iron and steel industry. When the five-year plan was compiled, it was already clear to the specialists that it would be extremely difficult to fit the ambitious iron and steel construction programme into the allocation. The investment in iron and steel planned by the central authorities in Gosplan for 1935 was 2,000 million rubles, approximately the same as the amount in the

¹¹ RGAE, 4372/33/122, 135–132.

¹² RGAE, 4372/33/122, 161–160 (n.d., but from internal content evidently prepared in June or early July 1934).

five-year plan for 1935. On July 18, a memorandum from the Gosplan metallurgy department assessed this allocation in unusually favourable terms. It estimated that over half the total would be available for the construction of new factories; this would make it possible to begin the construction of the Bakal works and the second phase of the Kuznetsk works.¹³ But two days later, on July 20, the news was received that the allocation would be only 1,500 million, and might be as low as 1,375 million, considerably less than the investment expected in 1934. A very sharp memorandum from the metallurgy department stated that the 1,500 million would mean that no start could be made on the Bakal works or on the second phase of Kuznetsk, and that far fewer furnaces and rolling mills would be completed in 1935 than had been planned. The department conceded that this failure would not have a great effect on production in 1935 itself, but insisted that it would 'threaten the fulfilment of the targets set out in the five-year plan for 1936 and 1937'. And the lower figure, 1,375 million, would mean that the completion of major facilities at such works as Tomsky and Dzerzhinsky would be delayed, and part of Zaporozhstal', the only supplier of sheet steel now under construction, would have to be mothballed.¹⁴ These dire predictions proved to be amply justified, both for 1935, and for later years.¹⁵

The allocation to the non-ferrous metals industries was similarly reduced, from 1,000 million rubles in the five-year plan to 700 million rubles. The Gosplan department bluntly commented that this would 'presuppose that a number of basic building projects will be mothballed so that they will produce only after 1937'; as a result, the

¹³ RGAE, 4372/33/122, 259–255.

¹⁴ RGAE, 4372/33/122, 250–248.

¹⁵ Later development will be discussed in vol. 7. In 1935, the number of completions was as follows:

	<i>Planned</i>	<i>Predicted by metallurgy sector, July 20, 1934</i>	<i>Actual</i>
Blast furnaces	6	3	3
Open-hearth furnaces	40	30	26
Rolling mills	21	15	18

Actual figures are from Clark (1956), 322.

five-year plan would not be carried out.¹⁶ This pessimistic assessment in fact proved, except in the case of zinc, to be far too optimistic, as the following figures show (thousand tons):

	<i>1937 plan in five- year plan</i>	<i>1937: predicted in July 20, 1934 Gosplan memorandum</i>	<i>1937 Actual</i>
Copper	135	112	98
Zinc	90	70	77
Lead	115	101	62
Aluminium	80	53	38

The fuel sector of Gosplan similarly concluded that the allocation to the oil industry ‘fails to solve a number of especially important tasks and gives rise to alarm for the following years’. It also pointed out that the allocation to the coal industry would mean a delay in the work on new mines, and as these took five years to complete, it would threaten the prospects for supplying additional coal not only in 1937 but also in later years. The coal industry was also faced with the particularly acute problem of supplying accommodation for new workers, which could not be covered by the low allocation: at present even in the most favourable areas housing per head amounted to only 3.5 m², and at new mines the figure fell to only 2.2–3m².¹⁷

The second largest allocation in the investment plan was to Narkomput’: the allocations to Narkomtyazhprom and Narkomput’ together amounted to over 55 per cent of total investment. The allocation to Narkomput’, 3,000 million rubles, was relatively generous, amounting to 81 per cent of the amount allocated for 1935 in the five-year plan. For several years the inability of the railways to cope with the increased volume of freight had been a serious constraint on the economy, and the authorities were at last beginning to recognise that the main reason for this was insufficient investment. In the preliminary negotiations both Narkomput’ and the transport sector of Gosplan demanded substantially greater investment than was

¹⁶ RGAE, 4372/33/122, 247–246, dated July 20, 1934.

¹⁷ RGAE, 4372/33/63, 117–121 (oil industry, dated November 13, 1934); *ibid.* 60–88 (coal industry, dated November 12, 1934). These November memoranda were calling for an increase in the allocation announced in the previous July.

provided for in the five-year plan.¹⁸ The allocation of 3,000 million rubles met with strong objections. On July 20 the transport department of Gosplan pointed out that while 3,800 million rubles ‘in general corresponds to the proposals of the five-year plan’, a reduction to 3,400 million rubles would mean that investment in new lines and in factories serving the railways would be drastically cut; moreover, they would be able to afford only 450 of the 650 million rubles of new rolling stock planned for 1935. As for the allocation of 3,000 million rubles:

[This amount] would additionally require sharp cuts in the allocations to the main services supporting the locomotives, wagons, and track, and would bring about a further reduction in the allocations to new construction – not merely the almost complete cancellation of work on new projects, but also the mothballing of part of the projects already under way.¹⁹

Light industry suffered the most savage cut. The five-year plan proposed a major expansion in both the light and the food industry, ‘creating large-scale machine industries’. The food industry had made substantial progress in this direction during the first five-year plan, but investment in light industry had been very small. Its most important products, cotton textiles, were already manufactured in large factory units, and the shortage of cotton and other raw materials meant that the industry would be able to manage using the existing machinery. The preliminary proposal made by Gosplan already reduced the allocation for 1935 from 2,600 million rubles in the five-year plan to 1,600 million rubles. The Gosplan department

¹⁸ Investment plans for Narkomput’, 1935 (million rubles in 1935 prices)

In five-year plan	3710
Proposed by Narkomput’	5500
Proposed by Gosplan transport department	4470
Initial proposal by Gosplan	4100
Revised proposal of transport department	3800
Revised proposal by Gosplan	3400
Allocated by Sovnarkom, July 29, 1934	3000

(RGAE, 4372/33/122, 161–160 (n.d.), and Tables 14 and 15 below).

¹⁹ RGAE, 4372/33/122, 149.

concerned with light industry complained that this would mean that it would be 'extremely difficult' for enterprises already under construction to be brought into operation in 1936 as planned, particularly as the estimates of the cost of constructing them, prepared several years ago, were far too low. Moreover, the construction of over 100 further new factories was due to begin in 1935, and the proposed investment would mean that only preliminary work could be undertaken. Construction would be delayed for a year or eighteen months, and the production plans for 1937 would not be met.²⁰

After it had submitted this memorandum the department was informed that the allocation had been reduced to a mere 750 million rubles. A further memorandum from the department insisted that this would mean that the planned start on 100 new factories would be completely abandoned in 1935. Only 18 of the 100 factories already under construction could be completed, and most of the remainder would be mothballed. The production plans for 1937 would have to be drastically cut.²¹ Nevertheless, the allocation in the July 29 decree remained at 750 million rubles.

The ceilings announced for 1935 in July and August 1934 remained unchanged until the end of 1934, in spite of frequent complaints behind the scenes about the low level of investment.²²

(B) THE DECISION TO END BREAD RATIONING

The obvious prerequisite for the abolition of bread rationing was the availability of sufficient bread to avoid shortages. When Stalin personally decided that it was time to abolish bread rationing is not known. He communicated his decision to his immediate colleagues on October 22, 1934. But, as we have seen (see p. 66 above), in the course of the summer and autumn of 1934 he displayed great anxiety about the course of the grain deliveries to the state in a series of letters written from vacation to Kaganovich. The 1934 grain harvest

²⁰ RGAE, 4372/33/122, 187–185 (memorandum to Kviring and Smirnov, n.d. – from internal evidence written mid-July 1934 or earlier).

²¹ The file contains two memoranda sent to Kviring at this time: the first, dated July 20, cites alternative figures of 750 and 900 million rubles; the second, evidently written shortly afterwards, mentioned only the lower figure. RGAE, 4372/33/122, 192–188, 184.

²² For the plan for defence expenditure, see Chapter 4, pp. 45–6.

was a reasonable one, though somewhat lower than the 1933 harvest, and the grain deliveries had progressed well. Somewhat more grain was available for internal consumption owing to the reduction of grain exports.²³ The extent of Stalin's anxiety – if he did not already have the abolition of bread rationing in mind – would be surprising.

The measures proposed by Stalin, including the *zakupki*, were to provide considerably more grain than in the previous year. Stalin at first said nothing to his colleagues about his intention of abolishing bread rationing. But on October 22 he wrote to Kaganovich, proposing what he described as 'a most serious reform': the complete abolition of bread rationing from January 1935.²⁴ According to Stalin, bread rationing was 'recently still necessary and useful, but [is] now a fetter on the economy'. This letter supports the hypothesis that his earlier insistence on the need for grain was closely linked with his hopes for the abolition of rationing: in order to abolish bread rationing, he wrote, it is 'necessary to have in the hands of the state 1,400–1,500 thousand million puds [22.9–24.6 million tons] of grain'. Stalin summarised the main provisions of the future reform in a concise statement:

By lowering comm[ercial] prices and increasing the ration price we will fix an average price for bread and flour, stabilise on it and vary it by areas. This will make it necessary to increase wages, and the prices paid for cotton, wool, flax, leather, tobacco, etc.

Stalin asked Kaganovich to consult the other members of the Politburo about the proposal to end rationing, 'and – if you agree – begin to prepare the matter'.

On October 28, the day on which he received this letter, Kaganovich requested the Politburo to assemble in emergency session.²⁵ The Politburo, as always, agreed to Stalin's proposal.²⁶

²³ Grain exports amounted to 769,000 tons in 1934 (primarily from the 1934 harvest) as compared with 1,684,000 in the previous year (*Vneshnyaya torgovlya* (1960), 144).

²⁴ SKP, 513.

²⁵ *Ibid.*; this is a note on Stalin's letter, which is endorsed as having been read by Molotov, Zhdanov, Kuibyshev, Kalinin and Andreev.

²⁶ APRF, 3/43/51, 47. The decision set out the responsibilities of Veitser, Zelensky, Kleiner, Shvernik (with Veinberg as his replacement), Mezhlauk and Grin'ko for preparing different aspects of the reform, the work to be undertaken 'in strict

The decision was not included in the minutes (*bez protokola*), presumably in order to maintain particularly strict secrecy. On the same day Kaganovich wrote in reply to Stalin:

today we have given a number of tasks to Veitser, Kleiner and others, on the preparation of the question of the transition from the rationing system, and on new prices and wages. It will be a major and excellent business.²⁷

Stalin returned to Moscow at the end of October, and was closely involved in the preparation of the reform.²⁸

The abolition of rationing was presented in the press as a major triumph for the Soviet system; it was offered to the population as a new stage in economic development in which sacrifices and tribulations were past. It was the main topic of the central committee plenum which met November 25–28. At the plenum Molotov, in delivering the main report, praised the reform as enabling ‘a rapid development of trade in conformity with the requirements of the consumers in town and countryside’; the abolition of bread rationing marked ‘the beginning of the abolition of rationing for all food products and commodities’.²⁹ He explained that bread prices would vary by geographical area, for which purpose the USSR would be divided into eight Zones (*boyasy*). He also strongly insisted on the need to move over from the supply of flour to the supply of baked bread. He pointed out that in some industrial areas, such as the Ivanovo and Urals regions, bread was largely supplied in the form of flour owing to ‘impermissible backwardness in the baking of bread’. Prices should be arranged so as to stimulate the purchase of bread rather than flour.³⁰

In compensation for the price increases, wages in 1935 would rise by 4,100 million rubles, or approximately 10 per cent.

secrecy’. Kleiner, previously deputy head of Komzag, was appointed its head on April 10, 1934, replacing Chernov. Shvernik was head of the All-Union Central Council of Trade Unions.

²⁷ SKP, 519.

²⁸ For details see Khlevnyuk and Davies (1999), 572–3.

²⁹ The report, delivered on November 25, was published in I, November 30, 1934; the archives contain both a typed stenogram of the report (RGASPI, 17/2/528), and the authorised text in the printed but secret verbatim report (RGASPI, 17/2/536, 1–9).

³⁰ The passages about the importance of baked bread did not appear in the typed version of Molotov’s report.

The expenditure on higher wages and the higher prices of industrial crops must be balanced by the revenue from increased bread prices:

It must be planned so that the state should not suffer a loss.

Stalin interrupted with the remark 'It evidently comes out fifty-fifty (*tak na tak*), it is equal.' Molotov replied 'so far it is still with a surplus (*s gakom*)'; revenue was 'so far planned at 2–2½ milliard [thousand million] rubles higher' than expenditure, but precise financial estimates could not yet be made.³¹

Speakers who followed Molotov expressed some unease about the possible effects of the abolition of bread rationing. Zelensky placed great stress on the need to involve small-scale local and artisan industry so as to ensure that enough bread was available. It was not merely that bakeries were insufficient; in some areas bread had to be issued as grain because the grain mills were incapable of producing enough flour. But there was a more general problem:

People have grown accustomed in the past five years to ration cards, and reckon that it is calmer with cards, and many people fear that they will be in difficulties.³²

Nikolaeva from Ivanovo region pointed out that in her region 54 per cent of textile workers received flour rather than bread, and took flour even when bread was available.³³ Postyshev complained that many workers were compelled to buy flour at high prices; they would need somewhat higher wages to meet the extra cost.³⁴ Razumov,

³¹ The exchange with Stalin does not appear in the published report. Both the published report and the printed verbatim report in the archives include the following sentence which is not in Molotov's original typed version of the report: 'We must not set the aim that the state should gain any supplementary revenue from carrying out the present measure' – obviously inserted after Stalin's speech at the plenum – see p. 126 below. These two versions of Molotov's report omit any mention of the 2,000–2,500 million rubles.

³² RGASPI, 17/2/536, 10–11. In the typed stenogram of this speech, Zelensky referred to a 'huge' rather than a supplementary growth of local and artisan industry (RGASPI, 17/2/529, 3). The passage about the lack of mills appears in the typed stenogram but not in the printed report in the archives (*ibid.* 5).

³³ RGASPI, 17/2/536, 11.

³⁴ RGASPI, 17/2/536, 13.

from West Siberia, insisted that workers in West Siberia received sufficient rationed bread, and would object when they had to buy unrationed bread at three times the rationed price. He was twice interrupted by Stalin, who commented 'The market does not take rationed bread into account' and 'You want to prove too much. You want to base yourself on the old rationed price.'³⁵

In his speech Veitser strongly stressed, with some support from Stalin, that the end of rationing meant that old habits must be given up and production must correspond to the needs of the consumer:

This does not mean that we are renouncing planning – on the contrary, it must be strengthened; but it must be real economically-oriented trade planning, based on good knowledge of demand. *Stalin*. And not office-based.³⁶

At the end of the session Stalin addressed the delegates in an unpublished speech which placed great emphasis on the enhanced importance of the consumer and on the use of prices and wage incentives; and said little about administrative control.³⁷ 'We must stand strongly with both feet on the foundation of keeping account of the requirements of real people, on the basis of getting near to the consumer'. Stalin outlined five major advantages of the reform.

First, it would strengthen the money economy and develop trade to the full. With rationing ('in my opinion stupid') the consumer 'was entirely not taken into account'.³⁸ It was a system of 'mechanical, blind, bureaucratic distribution'. But with its abolition:

The tastes, requirements and wishes of particular areas and individual consumers will have to be taken into account by our trading organisations.

³⁵ RGASPI, 17/2/536, 18. In the typed version of Razumov's speech Stalin was recorded as saying 'the market does not take the rationed price into account'. Stalin also interrupted Razumov's comparison of the high price of flour with that of baked bread: 'Stop talking about flour. Talk about baked bread' (RGASPI, 17/3/529, 67, 66).

³⁶ RGASPI, 17/2/536, 14–16.

³⁷ RGASPI, 17/2/530, 78–98; a slightly revised version was prepared for the unpublished *Sochineniya*, xiv, 48–59.

³⁸ In the version prepared for publication in the *Sochineniya*, the phrase 'in my opinion stupid' and the word 'entirely' were omitted.

‘Bread will bring all the rest behind it’; ‘evidently we shall do the same for potatoes, sugar and manufactured goods’.

Secondly, the abolition of rationing would end the ‘bacchanalia of price’. Stalin resumed his insistence in his exchange with Razumov that the rationed price should not be considered a real price, so that the new prices already represented a price reduction ... ‘Market prices do not take ration prices into account because these are not a price but a gift to the working class.’

Thirdly, the reform would prevent speculation, which was ‘absolutely inevitable when there were in practice 2 or 3 prices for bread’; at present in large towns workers sold rations at higher prices which they had purchased for 50 kopeks a kilogram, and competed with the state, so that the state could not sell bread at the commercial price of 1 ruble 50 kopeks.

Fourthly, the ruble would be more stable, and the stability of the ruble would strengthen both planning and economic accounting (*khozraschet*).

Fifthly, the reform would compel trading organisations to ‘respect the consumer and recognise him as a human being’.

Towards the end of his speech Stalin strongly criticised Gosbank for claiming that the state would gain monetarily by two or three thousand million rubles. Narkomfin was wrong to assume that workers would buy as much bread on the market as they received in rations: skilled workers in industrial towns would buy less, and workers with low rations in the provinces would buy more, and the new prices would be lower for them, so they would gain:

What will we gain, and how much will we lose? In general it is not possible to estimate anything here in advance; to guess that the reform will give us a monetary gain is, in my opinion, like trying to write with forks on water.

We have also discussed this question with Molotov. They supplied him with all kinds of materials to the effect that we will gain, but when we examined the materials this turned out to be nonsense ... Perhaps the state will have a monetary gain from the reform, but it is more likely that there will be no gain. It is wrong to guess.

The published resolution of the plenum reiterated the general features of the reform, and called for the establishment of at least

10,000 additional bread kiosks (*lavki*) by April 1, 1935.³⁹ In the press the assassination of Kirov on December 1 overshadowed for a few days the preparations for the end of rationing. But after the publication of the Sovnarkom decree about the reform,⁴⁰ it returned to the centre of attention.

In an article published on December 22, Bukharin strongly supported the reform, and argued that one of the aims of the assassination of Kirov was to sabotage it. The enemy, Bukharin insisted, sought to disrupt the 'new and higher stage in our economic development'; the abolition of rationing would enable the introduction of true economic accounting, and would 'change daily habits, from the book-keeper to the storekeeper, from the engineer to the director'.⁴¹

The Sovnarkom decree of December 7 established the new retail prices for rye and wheaten bread, and the considerably higher prices for flour. The prices varied considerably by Zone: thus the retail price of standard wheaten bread ranged between Zones from 80 kopeks to 1.50 rubles per kilogram. The typical price was 1 ruble per kilogram; this was double the old ration price and two-thirds of the old commercial price (see Khlevnyuk and Davies (1999), Table 3). The decree also increased the delivery price paid by the state for cotton, tobacco and other raw materials; this was because the abolition of rationing meant that grain was no longer supplied to these specialised sectors of agriculture at the privileged ration prices, but at the new higher retail price.

The decree also announced that the wage supplement, which became known as the 'bread supplement (*khlebnaya nadbavka*)' (or sometimes as the 'bread and fodder supplement') would amount to 4,200 million rubles.⁴² The authorities were anxious that this should not provide a pretext for other wage increases. A further decision of

³⁹ *KPSS v rez.*, iii (1954), 256–60; the resolution first appeared in P, November 29, 1934. In the discussion of the resolution, Stalin, in spite of his earlier criticism of Razumov, endorsed his proposal to vary bread prices, commenting that it would 'make the transition more flexible' (RGASPI, 17/2/529, 78).

⁴⁰ SZ, 1934, art. 445, dated December 7; the decree was published in the daily newspapers on the following day.

⁴¹ I, December 22, 1934.

⁴² The breakdown between government departments was set out in an unpublished decree of December 5 (GARF, 5446/1/94, 143–145, art. 2672); the total was 4,148.5 million rubles, but excluded the gold and platinum industry (as well as the army and the OGPU, which do not seem to have been included in the total 4,200 million).

the plenum, published as a decree of Sovnarkom and the party central committee in the issue of *Izvestiya* which contained Molotov's report to the plenum, prohibited 'any direct or indirect increase of the established wage (transfer from grade to grade, renaming of posts, etc.)'; the appropriate agencies should 'immediately cancel any unauthorised increase in wages and bring those guilty strictly to justice'.⁴³

In contrast to the wage supplements of June 1934, which had been allocated only to lower-paid workers, the new supplements were directed towards workers who had previously received high rations. In his report Molotov explicitly stated that the wage supplement would be differentiated so that 'a larger increase in wages will obtain where bread was supplied solely on the ration' and 'a somewhat smaller increase will obtain for those groups supplied on Lists 2 and 3'. The plenum resolution ruled that the wage increases should 'take into account the maintenance of the advantages established for particular groups and categories of workers in the ration system'. The specific supplements authorised in the detailed regulations varied sharply from List to List and Zone to Zone, approximately depending on the size of the bread ration previously received, and on the new price of bread in the particular Zone. Thus in the case of persons employed by establishments financed from the state budget, workers on the Special List received 9 rubles in Zone 1, and as much as 33 rubles in Zone 8. The variation between Lists may be illustrated by taking Zone 4 as an example. Workers on the Special List (the top category) received an extra 20 rubles per month, while those on List 3 (the fourth and bottom category) received only 8 rubles.⁴⁴ Within the Special List and List 1, workers in heavy industry working underground, and in hot and harmful work, received a slightly larger increase than other workers.⁴⁵ But this was not a differentiation according to wages earned. A highly-paid skilled worker in a factory whose employees were on the Special List received the same increase as a poorly-paid unskilled worker.

⁴³ I, November 30, 1934.

⁴⁴ GARE, 5446/1/95, 74–77 (art. 39, dated January 9, 1935).

⁴⁵ See order no. 1574 of Narkomtyazhprom dated December 25, 1934, in BFKhZ, no. 1, 1935, 36–9; and see Bergson (1944), 211. Similar regulations for other commissariats are also published in BFKhZ.

The amount paid was more than sufficient to cover the additional cost of previously rationed bread for one person.⁴⁶ But families with dependants were disadvantaged by the reform. Under the rationing arrangements dependants had received a bread ration in their own right. In October–December 1934 50.54 million people were in receipt of rations, and 23.97 million of these (47.4 per cent) of these were dependent family members.⁴⁷ In his speech to the plenum Stalin complained that under rationing ‘manual and office workers gathered their relatives together, subscribed to ration cards for them and sold half the bread’. The new regulations went to the other extreme. No additional payment was made for the dependent relatives, including children as well as spouses who were not working, and aged dependants. This meant that only employees without dependants were adequately compensated: in his speech to the plenum Stalin conceded that the compensation was ‘not in full – we are compensating by at least $\frac{3}{4}$ ’.⁴⁸ Inadequate or no compensation for dependants was a prominent general feature of the new arrangements for food supply. The new sugar ration introduced from January 1, 1935, provided a standard 50 per cent increase in the ration for employees with families, irrespective of the size of the family.⁴⁹

⁴⁶ Thus in the Special List the bread ration was normally 1 kilogram a day, the increase over the rationed price was 50 kopeks per kilogram, and the wage supplement was 16r per month.

⁴⁷ RGASPI, 82/2/45, 80. Those receiving rations because of their occupations included 22.87 million manual and office workers, 1.08 million students, 1 million pensioners, 0.13 million policemen (*militsionery*), 0.5 million special settlers and 1 million artisans (*kustari*). These figures evidently exclude the armed forces, the OGPU, and people confined in prisons and camps. According to Molotov’s report to the party plenum, 40 million persons were on the four ration Lists which received central supplies, and 10 million received rations from local resources (I, November 30, 1934); in his report Kaganovich noted that in addition to the 50 million, 24 million peasants received supplies of grain in return for their supply of industrial crops to the state (EZh, December 27, 1934).

⁴⁸ RGASPI, 17/2/530, 78–98.

⁴⁹ GARE, 5446/1/94, 340–341 (Sovnarkom decree dated December 26, 1934). Manual workers on the Special List received 1 kilogram per month if they did not have families, 1.5 kilograms if they did; manual workers on List 1 received 0.8 and 1.2 kilograms; white-collar workers on the Special List or working in Moscow, Leningrad, the Donbass or Baku received 0.5 and 0.75; the ration for all other blue-collar workers depended on resources (white-collar workers on Lists 2 and 3 were not mentioned at all).

(C) THE ADOPTION OF THE 1935 PLAN

The annual national-economic plan was not eventually adopted until February 8, 1935, at the time of the first session of TsIK immediately following the VII Congress of soviets. When the decrees of July 29 and August 5, 1934, setting out the main plan indicators, were approved, it was taken for granted that rationing would continue in 1935, and the decision to abolish bread rationing meant that all financial plans had to be revised. The work was not complete when the VII Congress assembled, and at the time of the congress only the main indicators of the plan were issued in a small-circulation booklet. The plan was approved by a decree of Sovnarkom.⁵⁰ This was a huge document containing 441 folios, partly printed and partly rough typewritten tables. Although the decree was not published, its figures were frequently cited in the speeches of the political leaders. The plan was finally sent to press by Gosplan in May 1935. *The National-Economic Plan for 1935* was an impressive and informative book of 942 pages, and widely available in an edition of 28,000 copies.⁵¹ This resumed – but only for two years! – the tradition which had been dropped after 1931.

The plan strongly emphasised that for the majority of items the amounts proposed corresponded to the figures for 1935 in the five-year plan.⁵² The plans for output per worker remained the same as in the decrees of July and August 1934. The planned growth in the gross production of Narkomtyazhprom was increased from 16 to 19 per cent as a result of the continued progress in the last months of 1934. The main production targets in physical terms, however, were largely unchanged as compared with the summer of 1934.⁵³

⁵⁰ GARE, 5446/1/37, art. 226, dated February 8.

⁵¹ *Narodno-khozyaistvennyi plan 1935* (1935). This was the second edition of the 1935 plan, published on June 2, 1935. This edition stated that the first edition, published at the beginning of 1935, 'included only the main indicators of the plan and was printed in a limited edition'. The second edition volume was an outcome of the combined efforts of Mezhlauk, appointed head of Gosplan in April 1934 (see p. 28 above), and Osinsky as head of TsUNKhU. This was a volume unprecedented in its elaboration. It included nearly 450 pages of text and over 500 pages of tables, and was printed in 28,000 copies, thus continuing the major improvement in public access to economic information following the dearth of the crisis years.

⁵² *Narodno-khozyaistvennyi plan 1935* (1935), 16.

⁵³ These figures are cited from the decree of February 8; changes in the published book were only minor.

As in previous years, the plan proposed that most of the increase would be obtained by a growth in output per worker. In 1935 this was to amount to 14.1 per cent, and would achieve 69 per cent of the increase.⁵⁴ In consequence, the total hired labour force would need to rise by only one million persons, from 23.3 to 24.3 million; departures from the labour force meant that nearly two million new entrants would be required.⁵⁵

The most important change was in the capital investment plan, which was raised from 18,000 to 21,190 million rubles, as a result of a series of decrees adopted in December 1934 and January 1935. The allocation to Narkomput' was increased from 3,000 to 3,937 million roubles, the most important element in the major drive to end the transport bottleneck (see pp. 214–19 below).⁵⁶ The allocation to Narkomtyazhprom was increased by some 700 million rubles.⁵⁷ A large part of this was earmarked for investment in the railway engineering and electric-power equipment industries.⁵⁸ The metallurgy and fuel industries, about which the greatest alarm had been expressed (see pp. 117–19 above), did not, however, receive any additional allocation. The remaining increase (1,569 million) was

⁵⁴ *Narodno-khozyaistvennyi plan 1935* (1935), 319–20.

⁵⁵ *Narodno-khozyaistvennyi plan 1935* (1935), 331–4. The 1,970,000 new entrants would come from the following sources (thousands):

Graduates of higher education establishments, technicums, etc.	560
Women previously engaged in housework	270
Orgnabor (excluding seasonal)	820
(Other	320)

The total number from orgnabor, including seasonal workers, would reach a maximum of five million persons, declining to 2.5 million in July and August during the harvest. These figures evidently include seasonal workers recruited informally as well as those signed up for orgnabor.

⁵⁶ GARF, 5446/1/478, 236–237 (art. 146/19, dated January 13, 1935).

⁵⁷ The Narkomtyazhprom allocation in the decree of July 29 was 6,950 million rubles; the new allocation was 7,374 million. In his report to the VII Congress of soviets, Ordzhonikidze stated that the allocation was 7,634 million rubles (Ordzhonikidze, ii (1957), 655–6); this included the bread and fodder supplement of 260 million (*Narodno-khozyaistvennyi plan 1935* (1935), 468).

⁵⁸ 100 million rubles for railway engineering; 191 million for electric power equipment.

distributed between a large number of government departments. The only major commissariat which did not benefit was Narkomlegprom, whose allocation was even reduced from 750 to 658 million rubles.⁵⁹

The plan stressed that although the finance provided for capital investment would not increase as compared with 1934, investment would increase in real terms owing to the planned reduction in investment costs of 15 per cent (12 per cent allowing for price increases).⁶⁰ This was a familiar example of planning out of hope rather than solid calculation: investment costs had increased in every year since 1929. The amount of new capital made available to the economy would also be increased by a higher completion rate: during the course of 1935 new capital in use would be 6.4 per cent greater in value than the amount of capital invested.⁶¹

A major factor in the proposed reduction in investment costs would be the increase in output per person employed in construction work by as much as 15 per cent (the increase in 1934 had been 8.9 per cent). As a result construction would require a smaller labour force: the average number of persons working in the industry would decline from 2,545,000 in 1934 to 2,321,000 in 1935.⁶²

The increases in the capital investment plan added to the financial problems facing 1935, but the main change in the financial situation was the substantial increase in the retail price of bread and flour following the abolition of bread rationing, which fundamentally changed the structure of internal trade and of the state budget. The price increase was almost entirely collected into the revenue of the budget as turnover tax; the payments to the peasants for the compulsory delivery of grain increased by only 10 per cent.⁶³ How much additional revenue this would amount to was a controversial matter. On January 4, 1935, a decree of Sovnarkom on the 1935 budget resolved to 'consider the question exhausted' by including the sum of 24 thousand million rubles in the revenue of the state

⁵⁹ The main decrees authorising these changes were GARF, 5446/1/94 (art. 2710, dated December 13, 1934); GARF, 5446/1/478, 223–6 (art. 2721, dated December 16) and *ibid.* 236–7 (art. 2750, dated December 22).

⁶⁰ *Narodno-khozyaistvennyi plan 1935* (1935), 12–13.

⁶¹ *Narodno-khozyaistvennyi plan 1935* (1935), 306.

⁶² *Narodno-khozyaistvennyi plan 1935* (1935), 311–12.

⁶³ See Malafeev (1964), 177.

budget.⁶⁴ Further Sovnarkom decrees specified the rates of turnover tax on flour and other grain products, listed the main sources of planned revenue from the tax in some detail, and fixed the revenue from commercial trade in 1935 at a minimum of 5,450 million rubles.⁶⁵ This was eventually increased to 6,450 million, 35 per cent more than the revenue from commercial trade apart from bread etc. in 1934.⁶⁶

The abolition of bread rationing transformed the structure of the budget. In the outcome of the unified state budget for 1934, revenue from the sale of grain, bread and flour amounted to 16.0 per cent of total revenue; in the 1935 budget estimates, the projected 24,000 million rubles from this source was nearly treble the amount in 1934, and amounted to 36.4 per cent of all budgetary revenue (see Khlevnyuk and Davies (1999), Table 9). In 1934, turnover tax plus the revenue from commercial trade amounted to 74 per cent of budgetary revenue; in the 1935 budget the proportion rose to 88.7 per cent. In consequence, socialised retail trade (including public catering) was planned to increase from 61,700 to 80,000 million rubles, by about 30 per cent.⁶⁷ The large number of government decisions adopted about turnover tax at this time reflected the complexity and importance of the task.

While the derationing of bread resulted in a large increase in budgetary revenue, expenditure increased simultaneously. Wages were planned to increase by 10 per cent (4,300 million rubles) to compensate for the increase in the price of bread.⁶⁸ The 1935 plan admitted that average wages in industry would increase by 19.6 per cent as compared with increased output per worker of 11 per cent.⁶⁹ The delivery prices for cotton, flax, hemp and tobacco, the producers of which had previously received grain products at low prices, were trebled or quadrupled.⁷⁰ In consequence, the prices paid by

⁶⁴ RGASPI, 17/162/19, 119 (decision no. 2, by correspondence); GARF, 5446/1/480, 7–8 (art. 23/6ss, dated January 7).

⁶⁵ GARF, 5446/1/480, 21 (art. 117/15s, dated January 17); GARF, 5446/1/95, 273–277 (art. 121, dated January 20).

⁶⁶ *Otchet ... 1935* (1937), 4–7. The state budget was formally approved in a published decree of TsIK on February 8; however, following normal practice the decision about currency issue was not included in the decree (SZ, 1935, art. 70).

⁶⁷ See Table 19, and GARF, 5446/1/97 (art. 226, dated February 8, 1935).

⁶⁸ *Narodno-khozyaistvennyi plan 1935* (1935), 331.

⁶⁹ *Narodno-khozyaistvennyi plan 1935* (1935), 319–20, 634, 641.

⁷⁰ See Malafeev (1964), 396–7.

food and light industry for agricultural raw materials increased dramatically. The 1935 plan approved by Sovnarkom listed substantial increases in the cost of production (per cent):

	<i>Increase (+) in cost of production</i>	<i>Increase (+) or decrease in cost of production deducting wage and price increases</i>
Narkomtyazhprom	+3.0	-6.0
Narkomlegprom	+51.6	+1.2
Narkompishcheprom	+53.1	-3.1
Narkomles	+13.0	-2.7
Narkomput'	+11.0	+5.8

The cost increase for all-Union industry as a whole would amount to 21.4 per cent.⁷¹

In spite of all these changes, the Politburo still insisted that Narkomfin and Gosbank should prepare their budget and credit plans for 1935 'so as to ensure that they are carried out without currency issue'.⁷² The attempt to bring this about caused great difficulties. A memorandum from Grin'ko pointed out that the abolition of bread rationing was 'an extremely complex reform'. At present the credit plan for 1935 was lacking as much as 4,000 million rubles. Moreover, the present draft budget contained a reserve for reducing retail prices amounting to only 2,000 million rubles, and budget revenue exceeded expenditure by only 500 million rubles. These were substantially lower figures than Narkomfin and Gosbank had proposed, but 'owing to the increase of budget expenditure it had been necessary to retreat from this position ... Nevertheless, I must particularly stress that I consider the reserves are extremely inadequate'.⁷³

Mar'yasin, in a report to Sovnarkom dated January 13, was as usual even more forthright. He insisted that when the credit plan had

⁷¹ GARE, 5446/1/97 (art. 226, dated February 8, 1935).

⁷² RGASPI, 17/162/17, 119 (dated January 4, 1935); *Narodno-khozyaistvennyi plan 1935* (1935), 658; GARE, 5446/1/480 (art. 23/6ss, dated January 7).

⁷³ RGAE, 7733/13/185, 63-62 (n.d.; from internal evidence written late December 1934 or early January 1935). Grin'ko also called for an increase in freight charges in 1935; and on January 4 the Politburo agreed to an increase of 150 million rubles (RGASPI, 17/162/17, 119).

been prepared without a deficit this had been on the assumption that it would receive 1,500 million rubles from the budget surplus provided by Narkomfin. This had not been available:

In view of the omission from the Gosbank credit plan of this amount, it has been prepared with a deficit of 1,500 million rubles. A deficit in the credit plan means currency issue.

He proposed that the deficit should be dealt with ‘in operational practice (*v operativnom poryadke*)’ when the quarterly credit plans were approved. This would enable the year to end ‘without currency issue or at least with minimum currency issue’ – a provocative phrase which revealed his scepticism about the Politburo decision not to issue net currency in 1935.⁷⁴

The state budget was formally approved by a published decision of TsIK on February 8, the day on which the unpublished economic plan was approved by Sovnarkom. It nominally provided for a surplus of 500 million rubles. The budget decision announced publicly a substantial figure for defence expenditure – 6,500 million rubles – a major step towards frankness, though disclosure was still incomplete.⁷⁵

⁷⁴ RGAE, 4372/92/53, 6–7.

⁷⁵ *Otchet ... 1935* (1937), 4–7; SZ, 1935, art.70.

CHAPTER SIX

‘CONTINUOUS ADVANCE’: JANUARY–SEPTEMBER 1935

In 1935, in contrast to 1934, the authorities somewhat enlarged their horizons in each quarter. In the first quarter, the production of Union and republican industry was planned to be as much as 22.4 per cent greater than in the same period of 1934; in the third quarter the equivalent figure was increased to 25.8 per cent. The quarterly investment plan naturally increased in each of the first three quarters: investment in the winter months January–March was always low. But the total investment planned for the first three quarters reached some 18.4 thousand million rubles, at least 78 per cent of the annual plan (see pp. 139–40 below). The caution about investment in 1934 had yielded by the summer of 1935 to optimism, reflected in the decisions in July about the 1936 plan (see p. 267 below).

(A) INDUSTRIAL PRODUCTION

Following a relatively slow start in January, industrial production resumed the rapid expansion characteristic of 1934, and in January–March amounted to 99.1 per cent of the quarterly plan. While Narkomtyazhprom production fulfilled only 97.6 per cent of its plan, this was an increase of 24.3 per cent as compared with January–March 1934.¹

Kviring, deputy head of Gosplan, in a report in the economic newspaper entitled ‘On the Road of Continuous Advance’, particularly praised the iron and steel industry, noting that while it had not quite reached the plan for the quarter, it had exceeded the plan for March. This had been achieved ‘not by introducing additional blast furnaces, open-hearth furnaces and rolling mills, but by their better utilisation’. In contrast, the fuel industry had lagged: if the shortfall in oil continued, it ‘would threaten the supply to tractors and vehicles,

¹ As compared with the same month of 1934, the gross production of the Union industrial commissariats (together with Komzag and the film industry) increased by 16.1 per cent in January, 21.9 per cent in February and 21.1 per cent in March (*Osnovnye pokazateli*, January 1935, 3, February 1935, 3, March 1935, 7).

which are increasing in numbers'. Kviring also praised the railways for nearly reaching the plan to load 60,000 wagons per day.²

A parallel report in the industrial newspaper claimed that 'the whole system for the preparation of industry for winter and for the progress of production in the complicated winter period was better than in preceding years in most heavy industry enterprises'. The quarterly plan had been fulfilled more successfully in 1935 than in the previous year: production had almost reached the level of October–December 1934 (usually it took some months for Narkomtyazhprom industry to regain the peak level of the previous year).³

The reports on industrial production in April–June also showed steady progress. The lengthy unpublished memorandum from Gosplan to the government on 'The Work of Industry in the First Half of 1935' was particularly enthusiastic.⁴ It reported that the production of Union and local industry had been 19.3 per cent greater than in the same period of 1934; almost all the industrial commissariats had fulfilled their plan, not just Narkomtyazhprom, and costs (allowing for price increases) had declined. The copper industry 'for the first time for many years successfully carried out its six months' programme'. However, as in January–March, coal and oil lagged. Output per worker had increased in the coal industry, but the number of workers had declined throughout the six months, and labour turnover had increased. Gosplan attributed the labour shortage to the familiar problems of coal mining: bad housing and the poor recruitment of labour from the countryside.⁵ In the oil industry, according to Gosplan, the main trouble was the failure to introduce new wells in both the Baku and Grozny fields.

The plan for the July–September quarter, influenced by the rapid advance during the spring, specified that the production of Union and local industry should be 25.8 per cent greater than in the same quarter of 1934, and amount to just over a quarter of the annual plan. This was a planned increase unprecedented since the rapid

² EZh, April 14, 1935. In March the average daily loading reached 59,200 wagons.

³ ZI, April 6, 1935 (A. Gerzenshtein).

⁴ RGAE, 4372/33/399, 77–46, dated August 8, 1935.

⁵ A report from Rukhimovich, responsible for the fuel industries, dated July 13, 1935, called for the introduction of a six-day week, which would increase the number of working days a month from 24 to 25, and for the greater use of piece work in the pay of engineering and technical workers, and of bonuses for outstanding workers. Somewhat surprisingly, it also proposed that payment should be made to brigades rather than to individual workers. GARF, 5446/16/4169, 54–59.

expansion of 1929–32. In the outcome, industrial output in July–September nearly reached the plan, and exceeded the 1934 level by as much as 23.4 per cent. Though somewhat less than planned, Narkomtyazhprom production was as much as 25.2 per cent above the 1934 level.⁶ The fuel industries continued to lag. But their performance was markedly better than in the same quarter of 1934. In the summer months holidays reached their peak and the harvest lured former peasants back to the countryside. In July–September 1934 oil production had stagnated and coal production declined as compared with the previous quarter. In the same months of 1935, however, oil production slightly increased and coal production rose by 4.7 per cent.⁷ The improvement in the coal industry was achieved in spite of a decline in the labour force, a result attributed to both more intensive work and the increase of mechanisation.⁸

The third quarter of 1935 was also marked by another novel success: the output of consumer goods exceeded the plan by 2.1 per cent. Food production increased particularly rapidly as compared with 1934: the greater availability of livestock enabled increased production by the meat and dairy industry. The increase in raw materials from livestock also favourably affected light industry, providing more leather for footwear and more wool for woollen textiles.⁹ With the arrival of the good cotton harvest, the production of cotton textiles, the most important products of light industry, began to revive after the decline of the previous twelve months.¹⁰

⁶ *Osnovnye pokazateli*, September 1935, 3.

⁷ *Tyazhelaya promyshlennost' 1936* (1937), 17, 23.

⁸ Output per worker per month increased in the Donbass in 1935 as follows (tons):

	<i>Exploitation</i>	<i>At the coal face (zaboi)</i>
January–March	18.7	49.9
April–June	19.8	53.5
July–September	21.9	57.5

In September output per worker in the coal industry as a whole was 16.9 per cent greater than in September 1934 (*Osnovnye pokazateli*, October 1935, 27, 29).

⁹ Food production was 30.1 per cent and light industry production 14.9 per cent greater than in the same quarter of 1934 (*Osnovnye pokazateli*, September 1935, xxviii–xxix, 3).

¹⁰ *Osnovnye pokazateli*, September 1935, 4–6, 14–17. As usual, production measured in 1926/27 prices increased more rapidly than production measured in physical

(B) INVESTMENT

The report for the first quarter published in the industrial newspaper (see p. 137, n. 3 above) acknowledged that capital investment had been unsatisfactory: labour, money and building equipment had all been used inefficiently. Later figures showed that investment in the quarter had amounted to only 3,425 million rubles as compared with the plan of 4,367 million.¹¹ How far this represented an increase as compared with the same months of 1934 is not clear. Production of cement, glass and timber by Union industry was substantially greater than in 1934, but 9.7 per cent less building materials were carried by the railways.¹² In the economic newspaper, a critical full-page report entitled 'Reduce the Cost of Construction!' pointed out that in the iron and steel combine 'Stal', building costs had actually increased by 4.5 per cent in January–March.¹³ However, the plan to increase output per worker had partly succeeded: the number of building workers on April 1, 1935, was one-third less than on the same date in 1934.¹⁴

For the second quarter, the authorities, influenced by the successful progress of industry, were optimistic about the possibilities of expanding investment. In the spring of 1934 strenuous efforts were

terms; improvements in quality played some part in this gap. With both measurements the increase was substantial.

July–September 1935: percentage increase above July–September 1934

	<i>Measured in 1926/27 prices</i>	<i>Measured in physical units</i>
Cotton textiles	3.5	1.1
Woollen textiles	16.5	10.2
Knitwear	26.8	23.6–34.8
Leather footwear	30.5	34.5
Flour	31.0	27.5
Meat	36.5	21.5
Preserved foods	59.2	44.0
Dairy produce	29.3	6.9
Vodka	12.4	7.6

¹¹ *Soveshchaniye* (1936), 33 (Ginzburg).

¹² Estimated from data for mineral building materials and timber for building in *Osnovnye pokazateli*, 1935, 112–13.

¹³ *EZh*, May 12, 1935.

¹⁴ See Table 18 and RGAE, 1562/10/468, 12 (n.d. [1937]).

made to cut down the investment plan, but in 1935 the April–June plan, 5,850 million rubles (5,980 including the bread and fodder supplement), amounted to well over a quarter of the annual plan.¹⁵

In practice, during the April–June quarter, in contrast to the slow start at the beginning of the year, investment greatly increased, though it did not reach the plan. Building materials carried on the railways exceeded the amount carried in the same quarter of the previous year by 10.7 per cent, so that for the first six months of 1935 as a whole the lag behind 1934 had been overcome.¹⁶ Investment increased by 60.4 per cent during the quarter, and amounted to 91.9 per cent of the quite ambitious quarterly plan.¹⁷ In heavy industry investment in April–June was 40 per cent greater than in the previous quarter, and 4.3 per cent greater than in the same quarter of the previous year.¹⁸ This was achieved almost entirely by an increase in output per worker between January and June. The number of building workers increased by only 4.1 per cent in the same period, largely because many workers had been retained during the winter months, when much less building could be accomplished.¹⁹ A survey of major sites showed that output per worker in physical terms increased by 50–65 per cent between January and June in each of the main operations: earth work, bricklaying and concreting.²⁰

The third quarter, July–September, was the peak of the building season, and the national-economic plan for July–September adopted at the full meeting of the Politburo on June 1 included an ambitious investment plan. In spite of the shortfall in the second quarter, investment was set at the record figure of 8,005 million rubles, including the bread and fodder supplement. The decree stipulating this sum also decided to expand the Moscow ball-bearing plant and to establish a similar factory in Saratov, and authorised the NKVD to undertake the first stage of investment in the future nickel centre at Noril'sk.²¹

¹⁵ RGASPI, 17/162/17, 143 (art. 48, dated March 10); GARF, 5446/1/480, 147–154 (art. 405/51s, dated March 11). A supplementary plan dealing with output per worker and costs was approved on March 26 (GARF, 5446/1/99, 342–87 – art. 514).

¹⁶ *Osnovnye pokazateli*, 1935, 113.

¹⁷ *Soveshtanie ... stroitel'stva* (1936). It amounted to 5,494 million rubles as compared with the plan of 5,980 million.

¹⁸ *Tyazhelaya promyshlennost' 1935* (1936), 295.

¹⁹ *Tyazhelaya promyshlennost' 1935* (1936), 297.

²⁰ *Tyazhelaya promyshlennost' 1935* (1936), 298.

²¹ RGASPI, 17/3/964, 1, 57–59 (dated June 1, 1935); GARF, 5446/1/102 (art. 1072); 5446/1/481, 121–122 (both dated June 2). A supplementary decree was

During the quarter investment increased rapidly. The partial data available at the time showed that the proportion of the annual plan fulfilled increased from 38.3 per cent by July 1 to 65.5 per cent by October 1.²² Investment by Narkompros, largely a result of the implementation of the programme to build new schools (see p. 19 above), reached 83.0 per cent of the annual plan by October 1. A survey in August of a large sample of schools under construction claimed that they were now 90.2 per cent completed as compared with only 13.2 per cent on January 1.²³ In contrast, only 54.1 per cent of the annual planned investment in housing had been carried out by October 1.²⁴

Early in the third quarter, on July 11, an important but very belated decree was promulgated and published 'On the Plan for Completion (*pusk*) of New Enterprises in 1935'. This sought to maximise the new capacity made available in 1935 by developing proposals already set out in the annual economic plan on February 8. It listed in some detail the main capital projects to be completed in 1935, 'with the aim of timely and successful preparation for the mastering of the new enterprises and production units'. Total new capacity to be introduced during the year was valued at 22,375 million rubles, almost equal (insofar as the prices were comparable) to the investment to be made in 1935.²⁵ Nearly all this programme remained to be completed. A survey covering one-third of the total showed that only 23.4 per cent of the annual completions plan had been

promulgated on June 22 (GARF, 5446/1/103 – art. 1267). A Politburo decision of June 20 authorised Gulag to take over construction and administration of the Noril'sk combine from the Northern Sea Route administration (RGASPI, 17/162/18, 62, 66–67 – art. 203).

²² *Osnovnye pokazateli*, August 1935, 95–7; October 1935, 115–17. According to later data, investment in July–September amounted to 6,338 million rubles, 15.4 per cent greater than in the previous quarter and only 81.1 per cent of the quarterly plan, which had been increased to 8,815 million rubles. (*Soveshchanie ... stroitel'stva* (1936)). By October 1, only some 62 per cent of the annual plan had been carried out (*Soveshchanie ... stroitel'stva* (1936)). The results for Narkomtyazhprom were similar (*Tyazhelaya promyshlennost' 1935* (1936), 295).

²³ *Osnovnye pokazateli*, October 1935, 115–17; August 1935, 112–13.

²⁴ *Osnovnye pokazateli*, October 1935, 115–17.

²⁵ SZ, 1935, art. 325. The new capacity was presumably valued at 'estimate prices', while current investment was given in current prices or 'planning prices', and included a substantial sum for capital repair as well as new investment. We have been unable to establish the extent to which these figures are comparable, but they were very frequently compared in Soviet sources.

achieved by July 1.²⁶ Some major industries lagged far behind the annual plan:

New Capacity in 1935²⁷

	<i>Plan</i>	<i>Actual: January–June</i>
Electric power (th. kWh)	817	89
Coal (million tons)	22.3	0
Oil wells drilled	1292	366
Blast furnaces	6	2
Open-hearth furnaces	24	7
Rolling mills	22	6

In the July–September quarter further projects were completed, but the results lagged far behind the plan. Reports covering about a quarter by value of the projects to be completed by the end of the year showed that only 34 per cent had been ‘transferred into exploitation’ by October 1, and only 59 per cent of those due for completion during the quarter.²⁸

(C) INTERNAL TRADE FOLLOWING THE ABOLITION OF BREAD RATIONING

In January–March, the crucial first months after the abolition of bread rationing, the food industry overfulfilled its plan, and its production was 15.7 per cent greater than in the same period of 1934.²⁹ However, retail trade turnover reached only 90 per cent of the plan. This was primarily due to the absolute decline of public catering. Data published later by TsUNKhU showed that the number of dishes sold in January–March was 30 per cent less than in the same quarter of 1934, and that even in value terms sales had declined slightly.³⁰ The main reason for the decline was that after January 1, 1935, bread and flour were sold to public catering establishments at the new retail prices; previously they had been sold at low rationed

²⁶ *Osnovnye pokazateli*, July 1935, 117.

²⁷ Derived from SZ, 1935, art. 325.

²⁸ *Osnovnye pokazateli*, September 1935, 138.

²⁹ *Osnovnye pokazateli*, March 1935, 6. This figure includes the industry of both Narkomishcheprom and the People’s Commissariats of Local Industry.

³⁰ *Osnovnye pokazateli*, 1935, 165.

prices. This led to a rapid rise in the cost of meals in canteens, buffets and restaurants, and workers tended to eat there less frequently. The decline proved to be permanent. Sales continued to decline throughout the second five-year plan. Even in 1956, following a large temporary increase in public catering during the second world war, the number of dishes sold was lower than in 1934!³¹ This was a significant change in the eating habits of the urban population.

Bread, and flour to make bread, were of course the most important items in the food budget of both workers and peasants. The higher prices from January 1 were widely unpopular, particularly among poorly-paid workers, for whom bread was the major item in their food budget, and among those with many dependants. Secret party reports in Leningrad noted that the poorest-paid workers were the most hostile. A worker in the Putilov factory commented that 'for those who make 500 to 600 rubles per month, [the price increases] are nothing, but for those workers who make 100 to 150 rubles, it will be difficult'.³² One worker commented that 'only the rich will eat white bread, as in the past'.³³ Workers with children were particularly indignant. At one factory a female trade union organiser complained that owing to the inadequacy of the additional pay 'now our children will have to live by begging'.³⁴ A party member with a family of seven complained when the reform was introduced 'I don't have enough bread even now'.³⁵ Some people even claimed that Kirov's murder, which took place two days after the end of bread rationing was announced, was a protest³⁶; and at a meeting on the death of Kirov participants complained that the restriction of the sale of groats and flour would mean that they would have to buy them at higher prices on the market.³⁷ A few weeks after the free sale of bread was introduced, 70 women at the Lebedev factory in Leningrad went to the director to demand increased wages, and those who refused to leave his office were removed by factory security; but concerted protests seem to have been rare.³⁸ Better-paid

³¹ *Narodnoe khoziaistvo SSSR v 1958 godu: statisticheskii ezhegodnik* (1959), 743.

³² *Slavic Review*, 56 (1997), 494 (Rimmel); see also the housewife's comment reported on p. 496; and S. Davies (1997), 140.

³³ S. Davies (1997), 29.

³⁴ *Slavic Review*, 56 (1997), 493 (Rimmel).

³⁵ S. Davies (1997), 29.

³⁶ *Slavic Review*, 56 (1997), 483–4 (Rimmel).

³⁷ *Ibid.* 491.

³⁸ *Ibid.* 497.

workers, on the other hand, defended the end of rationing on the grounds that it enabled the purchase of more bread at prices lower than those on the market.³⁹

In spite of the widely-expressed discontent about the failure to provide compensation for the increased prices to dependants, the problem received little attention in the press. Such compensation could hardly have been provided as part of the normal wage. It would have been possible to pay child allowances to working parents, but the rare comments in the press on the position of dependants did not consider this possibility. In his report to the Moscow party organisation in December 1934 (see p. 129, n. 47 above), Kaganovich brusquely commented that 'we cannot of course fix wages on the per-eater principle; wages are fixed according to the skill and productivity of labour'.⁴⁰ An article by a bank official in the economic newspaper claimed that only 12–18 per cent of workers had more than one dependant, and proposed that their cases should be dealt with by bringing non-working members of the family into employment, and by helping workers with dependants to improve their skills so as to earn more.⁴¹ But this was a pious hope rather than a practical proposal.⁴²

With this mixed popular reception of the end of bread rationing, the authorities made great efforts to secure an adequate supply of bread and flour. For those members of the urban population who had received a low bread ration, or no ration at all, and for peasants who were purchasers of grain products, the new prices were lower than the old commercial and market prices. It was expected that in the first weeks after the reform peasants in large numbers would seek to purchase bread and particularly flour in the towns. For this reason the decree of December 7 (see pp. 127–8 above) stipulated that temporarily the maximum amount of bread to be purchased by one person was two kilograms and the maximum of amount of flour only 1 kilogram.

³⁹ *Ibid.* 485, 487–8. For hostile and favourable comments on the end of bread rationing recorded in the NKVD files see also Osokina (1998), 180–1.

⁴⁰ EZh, December 27, 1934.

⁴¹ EZh, December 30, 1934 (G. Kos'yachenko).

⁴² Trotsky, writing from exile, complained that 'the abolition of consumer rationing directly harms the workers, especially the lower extremely poorly-paid strata. i.e. the vast majority'. He nevertheless commended the abolition of rationing in principle, insisting that 'the transfer of economic relations to the language of money is entirely necessary at the present initial state of socialist development, in order to calculate the real social use and economic effect of the outlays of labour energy by workers and peasants' (*Byulleten' Opozitsii*, 42, February 1935, 2).

The experience of the first few weeks of 1935 confirmed these fears. The free sale of bread was relatively smooth in large towns which had adequate supplies of flour and adequate bakeries. But in small towns and in the countryside it proved impossible to meet demand; in the first ten days of January two-thirds of the planned monthly supply of flour to the countryside was already exhausted.⁴³ Long bread queues appeared in many towns. As early as January 8 Kleiner and Veitser sent a memorandum to Stalin and Molotov describing this situation, urging the allocation of extra grain to some regions, and calling for special measures to 'regularise trade in bread in the countryside'.⁴⁴

Following this memorandum the Politburo approved a decree of the central committee and Sovnarkom, dated January 11, which instructed local authorities to reallocate grain so as to give priority to industrial areas and areas producing industrial crops (Stalin added to the text at this point 'at the expense of rural locations'). The decree provided that the sale of bread in each rural district must be restricted on a daily basis to one-thirtieth of the monthly plan for the district. In the countryside bread must primarily be sold in canteens and buffets of institutions, with priority to their employees. In compensation, additional fodder crops could be issued in the countryside.⁴⁵ Thus the decree in effect established a system in the countryside confining bread issues to those employed by the state. This resulted in a sharp switch of bread sales in favour of the towns in the month as a whole (see Khlevnyuk and Davies (1999), Table 5 (c)).

Following the decree, even larger numbers of peasants made their way to the towns in search of bread. The State Procurator reported that the bread queues which formed in the towns resulted in a number of deaths from suffocation, and led urban employees to abandon their work in search of bread. As a result of the excess demand for bread, informal rationing arrangements temporarily re-emerged in many towns.⁴⁶

Outside the large towns, bread and flour shortages continued for some months. The restrictions on sales in the countryside continued; and in March a further decree specified that the sale of flour, groats and macaroni should take place in all trade outlets only once every

⁴³ GARF, 5446/16a/329, 17.

⁴⁴ RGASPI, 17/163/1051, 77–83.

⁴⁵ RGASPI, 17/163/1051, 77–78; GARF, 5446/1/95, 159–60 (art. 39).

⁴⁶ GARF, 5446/16a/329, 47–49, 59. See also Osokina (1998), 182, citing NKVD reports on the very widespread reintroduction of forms of local rationing in the first few months of 1935.

two days.⁴⁷ In a detailed report to Molotov on the sale of bread and flour in the first ten days of April, Veitser noted that 'demand in the countryside is extremely high ... queues have formed in a number of places'. He gave examples of queues of 100–150 people in rural district towns. In larger towns 'the flood of visitors from rural districts seeking grain has continued'; and cases had been reported of the speculative purchase of bread and flour for illegal resale in the countryside at higher prices. Veitser listed a number of larger towns in which there had been queues of 70 or more people, including Novosibirsk, Chersonesus and Ashkhabad.⁴⁸

A different kind of difficulty confronted the trading agencies for other food products; it proved difficult to sell them at the prevailing commercial prices. This was primarily because, with the improvement in agriculture, the supply of food to the kolkhoz market by both kolkhozy and peasants considerably increased; the kolkhoz market prices for nearly all foods continuously declined. Thus a Narkomfin report on the first quarter of 1935 noted that on the kolkhoz market in February the prices of meat were 17 per cent lower than in February 1934, the prices of dairy products 27.4 per cent lower, of eggs 18.9 per cent lower and of vegetables 37.5 per cent lower. As a result 'prices for butter, dairy products and meat on the kolkhoz markets are considerably lower than the prices of free sale [i.e. commercial prices] of the socialised sector in those towns in which free sale of these products is allowed'. The report commented wryly:

Until now we have not taken into account the structure of the turnover of kolkhoz trade in compiling both the trade plan and the revenue of the budget. Now in compiling and approving the plans we need to include the turnover of kolkhoz trade in the indicators.⁴⁹

With the increase in supplies, it also proved difficult to sell at the prevailing commercial prices some products, such as toilet soap, for which there was no competition on the kolkhoz market.

In all these cases the obvious solution was to reduce commercial prices. But in order to obtain the planned amount of budgetary

⁴⁷ GARF, 5446/1/480, 147–148 (art. 405/51s, dated March 11).

⁴⁸ GARF, 5446/82/36, 42–36 (dated April 15).

⁴⁹ RGAE, 7733/13/184, 49–51 (unsigned memorandum entitled 'Fulfilment of the Balance of Money Incomes and Expenditures of the Population in the First Quarter of 1935').

revenue, it was also necessary to increase the low normal retail prices in rationed and closed trade. During 1935 price policy moved inexorably towards the closing of the gap between commercial and normal prices. But there were sharp differences between government departments about how to implement this policy. Narkomvnutorg, anxious to increase trade turnover, frequently proposed the reduction of commercial prices. Gosplan and Narkomfin, concerned about the reduction of revenue which this entailed, were more cautious. The decisions of the Politburo and Sovnarkom were usually compromises.

As early as January 5 Veitser proposed to Stalin and Molotov that a unified price should be introduced for confectionery, 40 per cent lower than the commercial price. This in effect meant the abolition of rationing of confectionery. Veitser explained that the rationed sales were products of a very low grade, which were only able to be sold because they were cheap. Gosplan and Narkomfin objected, and the government approved a price reduction intermediate between their proposal and that of Narkomvnutorg.⁵⁰

In February, on the basis of a memorandum from Veitser, supported by Mikoyan as People's Commissar for the Food Industry, and endorsed by Molotov, the Politburo and Sovnarkom approved the reduction of the commercial prices of milk and toilet soap. The main argument in favour of the proposal was that these products were difficult to sell at the prevailing commercial prices; substantial stocks of soap had accumulated.⁵¹

Then on March 5, in a memorandum to Stalin and Molotov, Veitser, again with the support of Mikoyan, reported that in January and February macaroni sales had amounted to a mere 35 per cent of the quarterly plan. He accordingly proposed that the limit on the number of days on which macaroni could be sold should be removed, and that its price should be reduced by 14 per cent.⁵² On behalf of Narkomfin, Grin'ko approved the removal of the limitation on sales, but objected to the proposed price reduction on the grounds that the retail price would then be lower than the cost of production.⁵³ A commission chaired by Mikoyan proposed a compromise, and on April 3 Sovnarkom approved a price reduction of 7 per cent.⁵⁴

⁵⁰ GARF, 5446/16a/377, 1-6.

⁵¹ GARF, 5446/17/279, 16.

⁵² GARF, 5446/16a/378, 15-16.

⁵³ GARF, 5446/16a/378, 22-22ob.

⁵⁴ GARF, 5446/16a/378, 3; GARF, 5446/17/279, 15-16.

During April–June Narkomfin, Gosbank and Narkomtorg, with the support of Molotov as chair of Sovnarkom, continued their efforts to increase trade turnover and to reduce the amount of normal trade at low prices. A Sovnarkom decree dated March 20 fixed the amount of meat to be made available for commercial ('open') sale at 60,000 tons in 1935, and increased the number of towns in which these open sales were permitted.⁵⁵ On April 23, on a proposal from Molotov, the Politburo approved a Sovnarkom decree authorising unified prices for makhorka (cheap tobacco), preserved foods and woollen fabrics, thus ending the existence of parallel commercial and normal prices for these goods. In the case of makhorka, the price in closed trade had previously been 25 kopeks a packet, and in open trade 1 ruble; the new unified price was fixed at 50 kopeks. As only 13 per cent of retail trade had taken place at commercial prices, the new price meant that budgetary revenue per kilogram of makhorka would increase. In the case of woollen fabrics, as much as 95 per cent had been sold at commercial prices, but they were nevertheless still in short supply; the new 'unified' price was therefore simply fixed at the level of the old commercial price. Nearly all sales of preserved foods had also been at commercial prices, but it was decided that their new unified price must be lower than the commercial price; it was estimated that the new price would mean a loss of 30 million rubles to the budget by the end of 1935. But this loss could not be avoided, as adequate sales had proved impossible at the old commercial price.⁵⁶

In spite of all these measures, the sale of food products at commercial prices continued to lag. Early in June a Narkomfin memorandum noted that kolkhoz market prices continued to be lower than commercial prices for 'dairy and oil products, eggs, etc.', and that this had 'a definite influence on the failure to fulfil the plan for the sale of food products'.⁵⁷ Nevertheless, the results of the state budget and the credit plan for April–June were relatively satisfactory: net currency issue amounted to 450 million rubles (see Table 21), and thus came within the limits fixed by the Politburo. However, there was a snag. The increase in currency issue was not sufficient to cope with the

⁵⁵ GARF, 5446/1/99, 261–263 (art. 470).

⁵⁶ GARF, 5446/17/39, 24–26. On May 15 a Sovnarkom decree announced various deductions from price and wage incentives designed to encourage the sale of vodka (GARF, 5446/1/101, 349–352 – art. 901).

⁵⁷ RGAE, 7733/13/184, 28–29 (unsigned memorandum 'The Balance of Incomes and Expenditures of the Population in the 3rd Quarter of 1935', transmitted June 7).

expansion of retail trade, and a cash shortage temporarily emerged. On May 31, a decree of TsIK and Sovnarkom ruled that heads of organisations and enterprises issuing various kinds of money substitutes were to be sentenced to up to five years' deprivation of liberty.⁵⁸

In the summer, some shortages of bread and flour still occurred. Even as late as October 1935 the monthly report on internal trade noted that 'numerous faults at every level (in supplies from Zagotzerno [the state agency for the distribution of grain], and in the bakery and trading network, continued to cause hold-ups in the grain trade, and was bound to affect its development'.⁵⁹ But the situation in the countryside gradually improved. On June 17 Sovnarkom was sufficiently confident to issue a decree which resolved to 'cancel the existing arrangements for fixing daily limits on the sale of baked bread in rural areas'.⁶⁰ Evidently in order to ensure adequate rural supplies of grain, the Politburo substantially increased the July allocation to the countryside (see Khlevnyuk and Davies (1999), Table 5 (c)). But, paradoxically, at this time the availability of grain from the substantial 1935 harvest began to reduce the rural demand for bread and flour. The monthly report on internal trade for August reported the 'lower demand for bread as a result of the new harvest'.⁶¹ And Gosbank reported to Molotov that the average daily receipts of the bank from grain had fallen from 48 million rubles at the beginning of July to 40.7 million at the end of August; it explained that 'in the main this is a result of the reduction of demand from the rural population for baked bread'.⁶² In the autumn the monthly flour allocation to the countryside was not fully utilised (see Table 5 (c)).

In both the second and the third quarters retail trade increased as compared with the previous quarter, but in both quarters it failed to reach the plan. In July–September, measured in current prices, it amounted to only 94.4 per cent of the quarterly plan.⁶³ Sales of meat, vegetable oil and sugar in physical terms lagged considerably behind the plan.⁶⁴ In January–September as a whole, retail trade amounted to

⁵⁸ SZ, 1935, art. 234, replacing the decree of June 1, 1930 (SZ, 1930, art. 345). For the 1930 cash shortage, see vol. 3, p. 152.

⁵⁹ *Tovarooborot SSSR za oktyabr' 1935*, 27.

⁶⁰ GARE, 5446/1/103, 226 (art. 1224, dated June 17).

⁶¹ *Tovarooborot SSSR za avgust 1935*, 12.

⁶² GARE, 5446/82/39, 109–107 (dated September 7, signed by G. Arkus).

⁶³ Estimated from data in *Osnovnye pokazateli*, September 1935, 173.

⁶⁴ *Osnovnye pokazateli*, September 1935, 180.

only 72.2 per cent of the annual plan.⁶⁵ These figures exclude public catering, which continued to decline. In buffets, cafés and restaurants the number of dishes sold per month declined in April–September, following the sharp fall in January–March. Prices were further increased, so that turnover rose in terms of current prices, but even so sales lagged considerably behind the plan.⁶⁶ By the end of September the lag of state and cooperative trade confronted the authorities with the prospect of excess purchasing power which would partly be taken up by kolkhoz trade, and partly result in shortages in state and cooperative shops.

(D) FINANCE AND CREDIT

On January 19 Sovnarkom approved the Union state budget for January–March, eight days after approving the quarterly economic plan, but three weeks before the approval of the annual plan.⁶⁷ To deal with the imbalance in the credit plan (see pp. 134–5 above), it allocated 550 million rubles to Gosbank for the revaluation of seasonal stocks; this was evidently on the assumption that income would be obtained by Gosbank from these stocks at the new higher retail prices. Nevertheless, a substantial deficit still remained in the quarterly credit plan. On January 26, even before this plan was adopted, the Politburo authorised an 'intra-quarterly currency issue' of 100 million rubles, to be liquidated by the bank by March 1.⁶⁸ The credit plan, eventually approved on February 13, when the quarter was half over, stipulated that there should be no net issue of currency in the quarter as a whole.⁶⁹ This was already an admission that the plan not to issue extra currency in 1935 was in jeopardy – normally the currency in circulation declined during this quarter.⁷⁰ The difficulties with retail trade during the quarter imposed a

⁶⁵ *Osnovnye pokazateli*, September 1935, 182–3, measured in current prices.

⁶⁶ *Osnovnye pokazateli*, September 1935, 194–5. The underlying data refer to organisation which included 60–65 per cent of all public catering. Turnover amounted to 85.5 per cent, but the number of dishes to only 68.1 per cent, of the quarterly plan (*ibid.* 173).

⁶⁷ GARF, 5446/1/85, 270–271 (art. 119).

⁶⁸ RGASPI, 17/162/17, 123 (art. 126); GARF, 5446/1/484, 1 (art. 158/21ss of Sovnarkom, dated January 27).

⁶⁹ GARF, 5446/1/98, 42–44 (art. 236).

⁷⁰ Even in 1932, an inflationary year, in the first quarter currency in circulation declined by 120 million rubles, and in January–June 1934 it declined by 161 million (see Table 21).

further strain on the state budget and the credit plan. Budgetary revenue received in January–March was less than planned.⁷¹ In the event currency issue amounted to 145 million rubles (see Table 21) – a clear indication that the effort to avoid net issue in 1935 was not viable.

The national-economic plan for the April–June quarter, approved on March 10–11 (see pp. 137–8, 140 above), stated that revenue and expenditure of the Union budget for the quarter would be equal, at 12,900 million rubles, and instructed Sovnarkom to prepare the credit plan ‘on the basis of the present directives and the plan for trade turnover’. At this time, in spite of the nominal balance in the budget, it was intended that the currency issue in the quarter would amount to 500 million rubles: Mar’yasin, in a memorandum to Molotov dated March 19, stressed the ‘tremendous tension in the credit plan of the second quarter’, and insisted that in order to restrict currency issue to 500 million rubles the trading organisations would need to sell off excessive stocks of flour, groats, macaroni and other commodities.⁷² But a commission chaired by Molotov, which examined the draft budget in detail, increased the proposed budget expenditure by 514 million rubles. On March 26, following the meeting of the commission, a joint memorandum from Grin’ko and Mar’yasin to Stalin and Molotov stressed that a currency issue of 400–500 million rubles could be achieved only if sales of flour and confectionery were substantially increased above the initial plan.⁷³ The Politburo decision on the budget and the credit plan, eventually adopted on March 28, on the eve of the new quarter, decided, in an ambiguous phrase, that ‘the utilisation (*ispolzovanie*) of currency issue shall in no circumstances exceed 400–500 million rubles, and may take place only with permission of the central committee in each individual case’.⁷⁴ This decision fully confirmed the sceptical attitude of Gosbank to the plan not to issue currency in 1935

⁷¹ Receipts from turnover tax and profits deductions amounted to 11,633 million rubles as compared with the planned 11,837 million (estimated from *Osnovnye pokazateli*, March 1935, 168).

⁷² RGAE, 4372/92/53, 32–36.

⁷³ RGAE, 4372/92/53, 47–50.

⁷⁴ RGASPI, 17/162/17, 160–161 (art. 220); GARF, 5446/1/484, 2–3 (art. 539/74s, dated March 29). A memorandum from Mezhlauk, dated March 26, set out the detailed proposals and was approved by Molotov the same day (RGAE, 4372/33/84, 120–116); the currency figure was, however, added at the Politburo. A further decree of Sovnarkom on the state budget for the quarter insisted on the importance of achieving the planned revenue from commercial trade and from the sale of spirits (GARF, 5446/1/100, 95–98, dated March 30).

as a whole, because it would be impossible to claw back this issue in the second half of the year: substantial currency issues were always required in the third quarter with the advent of the new harvest; and in the fourth quarter, even in the deflationary year 1933 only 31 million rubles had been withdrawn from circulation (see Table 21). In the event, following the strenuous efforts during the April–June quarter to increase budgetary revenue, currency issue amounted to 450 million rubles, the mid-point of the range fixed by the Politburo.

In the July–September quarter Grin'ko and Mar'yasin, with the support of Molotov, again struggled to balance the budget and limit the amount of currency issue. The Sovnarkom decree on June 14 on the Union budget and credit plan for the quarter authorised a net issue of currency amounting to as much as 800 million rubles, and emphasised that this meant that net issue over the whole period January–September must not exceed 1,400 million rubles (600 million rubles had already been issued in January–June).⁷⁵

To achieve this result the decree set out a number of exceptional measures designed to increase budgetary revenue during the quarter, especially previously unintended cuts in exports and increases in imports. These included (in million rubles):

<i>Measure approved</i>	<i>Increase in sales</i>	<i>Increase in budget revenue</i>
Remove goods from export, selling most internally (furs, tobacco, lights (<i>kishki</i>), preserved foods, paraffin, linen)	200	95
Import extra goods (mainly tea, rubber, tobacco, cocoa beans, hops)	285	185
Abolish dual prices for tea; fix new unified price at level of commercial price	60	45
Increased ration price of meat by 1 ruble per kilogram from July 20	50	45
Raise commercial price of cotton textiles by 50 kopeks per metre	100	95
Sell additional supplies of flour and oats	215	
Total	910	465

⁷⁵ RGASPI, 17/162/18, 58 (dated June 13); GARF, 5446/1/484, 24–27 (art. 1175/178s, dated June 14).

The decree justified the changes in the foreign trade plan on the grounds that they were needed to balance the quarterly budget and enable the currency issue plan 'to be restricted solely to the needs of agricultural collections and trade turnover'.⁷⁶ But the uncertainties of the financial situation were reflected in the promulgation over a month later of a further decree on the credit plan for the quarter which recorded a deficit of 1,463 million rubles, and contained last-minute handwritten alterations.⁷⁷

During the quarter a series of additional measures sought to ameliorate the fiscal situation by increasing trade turnover (and hence budgetary revenue). On July 3, the Politburo, in a resolution written personally by Stalin (an unusual event in the mid-1930s), established a commission chaired by Mikoyan with the aim of improving the unsatisfactory work of the consumer cooperatives in the countryside.⁷⁸ A few days later the Politburo agreed that consumer cooperatives and departments of workers' supply could sell food products at commercial prices through their special network of shops; previously these sales had been carried out only by state trade. The Politburo also increased the number of towns in which meat could be sold at commercial prices from 37 to 95.⁷⁹ As we have seen, retail trade as a whole continued to be less than planned. But the various measures to increase budgetary revenue by increasing commercial trade were accompanied by a large increase in revenue following the launching of a new mass loan.⁸⁰ Currency issue, at 701 million rubles, remained within the July–September limits.

(E) AGRICULTURE

A major event in the history of Soviet agriculture was the second congress of collective-farm shock workers, held in February 1935.⁸¹

⁷⁶ RGASPI, 17/3/965, 17–18; 17/162/18, 58, 64–65; GARF, 5446/1/484, 24–27. Owing to the huge gap between world prices and internal prices, the additional 485 million rubles of retail trade at commercial prices listed in the first two items above would be obtained by cutting exports by 2.097 million gold rubles and increasing imports by 1.298 million gold rubles.

⁷⁷ GARF, 5446/1/482, 56–57 (dated July 19).

⁷⁸ RGASPI, 17/163/1069, 2.

⁷⁹ RGASPI, 17/163/1070, 101 (decisions of July 7 and 16).

⁸⁰ Revenue from mass loans and self-taxation increased as follows (million rubles): January–March 1942; April–June 1423; July–September 2701; October–December 2858 (*Osnovnye pokazateli*, 1935, 259).

⁸¹ For the first congress, held in February 1933, see volume 5, pp. 207–9.

Stalin and most members of the Politburo participated, and it was attended by 1,436 delegates; 51 per cent of these were chairmen or brigade leaders of kolkhozy, and a further 25 per cent were described as 'rank and file workers'. 30.8 per cent of the delegates were women – a very large figure for that time, though most of the women occupied junior posts.⁸² The congress was opened on February 11 by Chernov as People's Commissar for Agriculture, and the first item on the agenda, and the main feature of the conference, in addition to nation-wide publicity for the success of collectivisation, was a report by Yakovlev, as head of the agricultural department of the central committee, on a new model Statute for the agricultural artel, replacing the previous model statute of March 1, 1930.⁸³ Speeches at the congress referred to the murder of Kirov and the recent death of Kuibyshev, but the general atmosphere was one of moderation and reconciliation. This was demonstrated by a speech by Bukharin. He praised Stalin's agricultural policies and condemned the right deviation, but did not attack the Zinovievites; the speech was applauded by the delegates and occupied a full page in *Pravda*.⁸⁴

At the congress commission discussing the Statute, Stalin in a lengthy speech strongly argued that the provisions for the household plot of the kolkhoz household should be extremely flexible. He rejected the view of 'comrades who have been very bold here and say 1/10 or 1/12 [of a hectare]':

We began to implant kolkhozy on a mass scale only about three years ago. The old society was built up in the course of hundreds of years, and if you think the new society can be built in three years you are mistaken ... Years are needed to strengthen the kolkhoz system properly, and the opinion of the collective farmers must be taken into account if they are not to turn away and to develop a completely unnecessary superfluous dissatisfaction ... So I propose that you should decide that the size of the household land of the kolkhoz farm should vary

⁸² *Vtoroi s'ezd* (1935), 247–97. Only 8.1 per cent of kolkhoz chairmen were women, as compared with 42.5 per cent of rank-and-file workers. On the other hand, women, who were very prominent in dealing with livestock, made up 49.2 per cent of the managers of livestock units (*fermy*).

⁸³ For the previous Statute, see vol. 2 of this series, p. 106: this Statute in turn replaced the Statute of February 6, 1930 (see vol. 2, pp. 90–1).

⁸⁴ P, January 16, 1935.

according to local conditions. It must not be less than a quarter of a hectare, it can be up to 0.5 hectares, and in some cases up to 1 hectare. I am afraid that that's too bold, and perhaps the amount should be larger.

Kalinin. Comrade Stalin, we haven't got enough land.

Stalin. Anyway, what I propose will be enough to prevent most collective farmers being dissatisfied, who have more than 0.5 hectares now.

He similarly called for flexibility in the amount of livestock held by the kolkhoz household.⁸⁵

Accordingly, the model Statute, adopted in its revised form by the congress on February 17 and approved by Sovnarkom and the party central committee, stated:

The size of the land of the household plot (*priusadebnaya zemlya*) in the personal use of the kolkhoz household (excluding land occupied by housing) may vary between $\frac{1}{4}$ of a hectare to $\frac{1}{2}$ hectare and in some districts up to 1 hectare depending on the regional and district conditions decided by the People's Commissariats of Agriculture of the Union Republics on the basis of the directives of the People's Commissariat of Agriculture of the USSR.

A separate section of the Statute provided that in most districts the household could hold in its personal use 1 cow and up to 2 calves, 1 sow and its progeny, or, if the board of the kolkhoz found it necessary, 2 sows and their progeny, up to 10 sheep and/or goats, an unlimited number of poultry and rabbits and up to 20 beehives. Larger numbers could be held as stipulated in areas with more developed livestock farming, and households in nomad districts such as Kazakhstan could hold 8–10 cows and their calves and 100–150 sheep and/or goats, an unlimited number of poultry, up to 10 horses and 5–8 camels.⁸⁶ These widely-publicised provisions provided the basis for the rapid expansion in future years of the personal earnings of collective farmers.

The weather for the harvest of 1935 was more or less consistently favourable. October 1934 was warmer than normal, and autumn sowings in 1934 for the 1935 harvest extended into a longer period. The temperatures in April 1935 were relatively high and assisted an

⁸⁵ TSD, iv (2002), 390–402.

⁸⁶ SZ, 1935, art. 82.

early start for the spring sowings. The growing season in the summer of 1935 was relatively cool, a further advantage.

Following the normal pattern, the 1935 harvest was planned to exceed that of 1934, presumed in the autumn of 1934 to be 90.4 million tons, and to amount to 95.2 million tons.⁸⁷ It was assumed that grain yields would rise from 8.8 tsentners per hectare in 1934 to 9.4 tsentners per hectare in 1935, while the area sown to grain would increase only slightly.

In practice, the sowings in the autumn of 1934 took place significantly earlier than in all previous years (see Table 25). By October 1, 31.9 million hectares had been sown, several million more than in all earlier years in the 1930s. The total eventually sown was less than in previous years, but there were grounds to expect that the average yield would be higher.

The spring sowings in 1935 in April and the first half of May took place much earlier than in previous years. By May 1, 50.1 million hectares had been sown; the amount sown in 1934, the highest previous amount, was only 36.2 million hectares, and on May 15 sowing had reached 78.3 million hectares, exceeding the 1934 record by 9 million hectares. The sowings in 1934 were already much more firmly based than those of the previous five years. Although eventually the total was not as high as the figures claimed in previous years, this was of little importance, because very late sowings usually had very poor results. The earlier sowings in both autumn 1934 and spring 1935 gave grounds to expect a higher than normal yield.

The harvesting campaign in 1935 progressed more rapidly than in the early 1930s. Throughout August the amount harvested was slightly less than in 1934, but in September the harvested area threshed was considerably greater than in any of the previous four years. There was every sign that the harvest would be very substantial.

(F) THE PUSH TO FURTHER EXPANSION

In the spring and summer of 1935 the political leaders manifested an enthusiasm about the progress of the economy which bordered on euphoria. The tricky operation of abolishing bread rationing had proceeded without any great mishap. Industry had progressed rapidly, and the transport bottleneck was being rapidly eliminated.

⁸⁷ RGAE, 4372/33/725, 2.

Although investment was not keeping up with the five-year plan, several major industries, and the railways, had been strikingly successful in using capital more efficiently. This new tendency, which had emerged in the previous year, seemed to offer great prospects for future development.

The optimism was dramatically expressed in Stalin's speech to army graduates on May 4. He declared in the published version of his speech:

We already have a powerful and first-class industry, a powerful and mechanised agriculture, transport which is developing, and reaching up to new heights, and a well-organised and excellently equipped Red Army ... This means we have in the main outlived the period of famine in technology ...

If our first-class works and factories, our state farms and collective farms, and our Red Army, had enough cadres capable of absorbing this technology, our country could obtain an effect three or four times as great as it had now.⁸⁸

The old slogan 'technology (*tekhnika*) decides everything' ... must now be replaced by a new slogan 'cadres decide everything'. This is the main thing now.⁸⁹

In the same month Ordzhonikidze, addressing the Council of Narkomtyazhprom, citing the familiar example of the improved efficiency with which iron and steel plant was being used, strongly criticised the existing so-called 'technically based norms'. He castigated them as conservative and out of date, providing 'a pretext for reinforcing our backwardness'.⁹⁰

⁸⁸ P, May 6, 1935. In the original version of his speech, Stalin stated:

If our industry had well-seasoned cadres who had mastered technology, we would have trebled the output, even more, I assure you; if our agriculture with its present machine base, possessing over 300,000 tractors, if this agriculture included experienced, reasonably experienced, leaders of agriculture, we could obtain a harvest three times as large, I assure you – this isn't boasting.

Stalin was obviously uneasy about associating himself with a specific claim about huge increases in output. In the version prepared for publication, 'output' was at first replaced by 'effect'. He then changed 'effect' to 'results' and then back again to 'effect'. (See the texts in Nevezhin (2003), 81, 89.)

⁸⁹ *Sochineniya*, i (xiv), 61–2.

⁹⁰ P, May 18, 1935, Ordzhonikidze (1957), 162–86.

In the same spirit the Gosplan report on the results of the first six months declared:

Industry not only strengthened the considerable rates of growth already observed in 1934 but also achieved a further rate of growth; this permits one to affirm the presence of the change in the rate of growth of industrial production which was referred to in cde. Stalin's speech of January 1933 as in prospect for the second half of the five-year plan.⁹¹

This is a reference to Stalin's optimistic prediction about the future at the plenum of the central committee in January 1933 in the midst of the 1932–33 economic crisis:

In the second half of the second five-year plan, say, we will be able to make a new powerful jump forward in construction and in the growth of industrial output.⁹²

Confidence in the economy born of success encouraged the political authorities to seek to expand the economy by further intensification of the use of existing labour and capital, and led to the emergence of the Stakhanov movement (see pp. 160–9 below). At the same time it pushed aside the financial caution which had played a major part in economic decision making since the summer of 1932. As we have seen (p. 131 above), the 1935 investment plan was increased by a series of specific decisions. Between February 8, when the investment plan was adopted as part of the annual economic plan, and July 29, when it was consolidated in connection with the preparation of the economic plan for 1936, planned investment increased from 21,684 to 24,842 million rubles, by 14.6 per cent. In this time of increasing awareness of the Nazi threat, the main increases were for directly defence purposes. On March 22, Narkomoborony was allocated an addition 315 million rubles (see p. 95 above). On April 22, the Politburo approved an elaborate report on the aircraft industry by a commission headed by Molotov; this included an additional

⁹¹ RGAE, 4372/33/399, 77.

⁹² P, January 10, 1933; for other aspects of this speech, see vol. 4, pp. 318–22. In his one intervention at the XVII party conference a year earlier, Stalin stated that the second five-year plan was only a minimum, which could be expanded in the control figures year by year (see vol. 4, p. 136).

allocation to Narkomtyazhprom for the industry amounting to 200 million rubles in 1935. The industry was also authorised to undertake new construction for the remainder of 1935 without technical projects or estimates – a decision in the opposite direction to the efforts to impose more stringent controls on the building industry.⁹³ On May 11, an comprehensive plan for the expansion of the gold industry set out the investment to be made in 38 separate sites, and increased the 1935 investment in the industry from 152 to 254 million rubles.⁹⁴ The allocation to the railways was also substantially increased, and substantial additional investment was also approved for housing and education, though this did not entirely compensate for the cuts made in July 1934.⁹⁵

These changes all reflected a new era in which the needs of both defence and welfare were given some priority over the needs of heavy industry. Although the reduction in the allocation to Narkomtyazhprom as compared with 1934 had now been more than fully restored, this did not improve the position of the coal and iron and steel industries; in both these industries the investment planned for 1935 was still no higher than in 1934. The extra allocations to Narkomtyazhprom had mainly been devoted to the special programmes for the aircraft and other defence industries, and for the gold industry.

On July 29, the consolidation of the expanded investment plan for 1935 was the background to a much more significant change: the approval of the preliminary much more ambitious plan for 1936, to which we return below.

⁹³ RGASPI, 17/162/18, 7–15 (art. 172).

⁹⁴ GARF, 5446/1/481, 35–36 (art. 851–132s); for the February 8 and July 29 investment figurers, see *Narodno-khozyaistvennyi plan 1935* (1935), 4 74 and GARF, 5446/1/102, 295–312.

⁹⁵ See sources listed in previous note.

CHAPTER SEVEN

‘ADVANCING TO ABUNDANCE’, SEPTEMBER–DECEMBER 1935

In September, simultaneously with the preparation of the plan for the October–December quarter, the Soviet leaders undertook two major modifications in economic policy. First, the Stakhanov movement was launched. During their efforts to accelerate economic development by the more intensive use of capital and labour, they stumbled across the production feat of a Donbass coal miner, Aleksei Stakhanov, and then transformed it into a major campaign. Secondly, they extended the abolition of rationing to all other foods.

(A) THE LAUNCHING OF THE STAKHANOV MOVEMENT

(i) The background

The drive to increase production largely depended on output per worker, which was planned to yield over 40 per cent of the increase in industrial production in both the five-year plan as a whole and the 1935 plan (see pp. 42 and 131 above). The growth of output per worker in turn depended both on improvements in the amount of capital employed per worker (together with the ‘quality’ of capital – the efficiency with which it was utilised), and on the efficiency and intensity of the workers’ efforts. Ever since the mid-1920s, Soviet politicians, planners, economists and engineers sought to measure scientifically – or at least accurately – the optimum output both of industrial plant and machinery, and of the workers themselves.

These endeavours resulted in the emergence of a complex system of ‘norms’ (*normy*) for measuring capacity and output; the system drew extensively on foreign experience.¹ Capital projects specified the optimum production capacity of the factory, and of the main production units within the factory. These were known variously as ‘technical norms’ (*tekhnicheskie normy*), ‘technical coefficients’

¹ For a comprehensive survey, see L. Siegelbaum, ‘Soviet Norm Determination in Theory and Practice, 1917–1941’, in *SS*, vol. 36 (1984), 45–68.

(*tekhnicheskie koefitsienty*) or 'limits' (*limity* or sometimes *predely*). Thus in the iron and steel industry the main technical coefficient for a blast furnace was the number of cubic metres of furnace volume required to produce a ton of pig iron – the smaller the number of cubic metres, the greater the productivity of the furnace. Similarly, the technical coefficient for an open-hearth furnace specified the number of tons of crude steel which could be produced per square metre of the floor area of the furnace – in this case, the larger the number of tons, the greater the productivity. Similar norms were adopted for specific pieces of machinery. In the coal industry the norm for a cutting machine or a pneumatic pick was the number of tons of coal it could hew in a given period. In the machine-building industries, with their great variety of machines, each machine or type of machine was supposed to have its own technical specifications (known as a *passport*).

These technical norms for equipment were usually prepared by the engineers in the project or research institute of the industry, or in laboratories or design bureaux attached to factories. With imported equipment, or equipment based on foreign models, the foreign specifications were used, modified for Soviet conditions.

These norms stated the *optimum* rather than the *maximum* production which could be achieved – production might be achieved above the optimum by working the equipment too hard so that its life was shortened. Naturally practice fell short of the optimum; and when the production plans for an industry or a factory were prepared, the planners used 'planning norms' (*planovye normy*) derived from, but lower than, the technical norms; these showed what was believed to be feasible to produce from the equipment in the period concerned.

A different type of norm, closely related to and often confused with the technical norm of the equipment, was the 'output norm' (*norma vyrobotki*) which specified the amount of production which a worker would be expected to produce in a given time. The output norm was used to calculate the amount of money the worker would be paid for a particular job (the *rastsenka*, normally known in Britain as 'the rate for the job'). The calculation of output norms was a very complex and tricky business, undertaken by the Technical Norming Bureau (TNB) of the factory and carried out by a large army of norm-setters (*normirovshchiki*). The TNB worked in uneasy association with the technical director of the factory, and the norm-setters in turn worked with the foreman of the shop concerned, and with the

workers themselves. The number of norms was very large. Some 210,000 norms were in use in the Gor'kii Automobile Works alone.² The norm-setters were also numerous, and usually poorly qualified. In the machine-building industry there were 12,000 norm-setters, these included 400 engineers and 2,200 technicians; the remaining 9,400 had no technical qualifications.³

Ideally, the output norms were supposed to be obtained by scientific measurement of the best practice – they should be ‘technical norms’. But usually, though they were often called ‘technical norms’, they were obtained by such empirical devices as making a percentage deduction from the time actually taken in the factory to produce the particular component, or by a guess at what it was reasonable to expect from the worker. Hence they were often described as ‘experimental-statistical norms’ or as ‘norms by eye’ (*na glazok*).⁴

By 1935 norms were coming to the centre of the stage. It was already evident that the ambitious multiple policy goals of the five-year plan would be very difficult to achieve. Even the considerable increases in the 1935 investment plan made in January–July 1935, and in the July 1935 version of the 1936 plan, failed to reach the five-year plan targets. But the efficiency with which equipment was used in the iron and steel and other industries had considerably improved since the beginning of 1934, and labour productivity had increased. This gave rise to hopes that both technical and output norms could be substantially increased. On March 10, 1935, the party central committee and Sovnarkom issued a decree announcing a partial revision of the norms (i.e. the output norms) in 1935.⁵ The decree closely associated the revision of norms with new capital equipment and the efficient use of existing capital:

New enterprises have been completed and new capital equipment has been introduced, the skills of the workers and the mastering of the use of new equipment have grown. In this connection the output norms of some groups of workers at many enterprises are

² See Filtzer (1986), 210.

³ ZI, December 29, 1935 (speech of Andreev to December 1935 plenum of party central committee).

⁴ Filtzer (1986), ch. 8, gives a detailed account of the variety of devices by which norms were accommodated to the political, social and economic circumstances of the factories.

⁵ RGASPI, 17/3/961, 14–15 (art. 91).

obviously out of date, and are a brake on the further improvement of labour productivity.

This particularly applied to machine building, iron and steel and coal, and to some branches of the food and light industries. In these cases the norms must be increased, and must result in the full use of the working day. The new norms must be adopted by May 1, and must not change for the rest of the year. In future new norms must be approved whenever new equipment is introduced. This was followed three days later by an order of Narkomtyazhprom repeating these decisions.⁶

On May 12, 1935, eight days after Stalin's speech on 'cadres' (see p. 105 above), one of the main issues discussed at the Council attached to Narkomtyazhprom was the 'technically-based norms' (*tekhnicheskio-obosnovannyye normy*) for equipment. Ordzhonikidze insisted that the existing norms 'are not progress, but in the best case a reflection of how far we have at present mastered a particular process, and in the worst case – it is yesterday'. He was challenged. Korolev, head of the aircraft industry, defended the 'passports' (*pasporty*) of machine tools, prepared by the appropriate laboratory, as 'the crucial factor in the utilisation of equipment and labour', but Ordzhonikidze sharply replied:

You know the metallurgists' passport of two years ago, what it was yesterday and today. When we negotiated with cde. Birman in February, we spoke of a passport of 1.15 [cubic metres of furnace per ton of pig iron], and he is coming up to 0.98.⁷

The question of technically-based norms was posed even more sharply on the railways. Kaganovich, newly-appointed People's Commissar, from April 1935 onwards strongly criticised the engineers in the commissariat who purportedly insisted that a daily loading of 55,000–58,000 freight wagons a day was a maximum limit, given the existing state of track and rolling stock. These limits were soon referred to as 'the bourgeois theory of the "limit"', and the

⁶ For the text of the order, see *Industrializatsiya, 1933–1937* (1970), 264–5.

⁷ RGAE, 7297/138/77, 120–122. Birman was at this time director of the Petrovskii iron and steel works. For the 'negotiations' at the Congress of Soviets on January 31, at which Birman agreed to 1.15 in a public discussion with Ordzhonikidze, see Ordzhonikidze (1957), 632–3.

‘limiters’ (*predel’shchiki*) were summarily dismissed. An article attacking the anti-state theory of the limit, published in *Pravda* on May 11, and signed ‘Transportnik’, is believed to have been written by Stalin.⁸ Then in July Kaganovich launched a campaign frankly known as ‘forcing the boilers’, which aimed to increase the time locomotives were in motion from 7.9 to 10 hours a day.⁹

(ii) *The Stakhanov ‘leap forward’*

It was in this context that the Stakhanov movement was launched. Both Ordzhonikidze and Kaganovich closely linked their homilies and imprecations about technical norms for equipment with the achievement of higher output norms by the workers. Thus in January 1934 Ordzhonikidze insisted that to achieve improved coefficients for blast furnaces ‘the issue here is solely a matter of people’, a matter of how well people worked.¹⁰ A year later, at the VII Congress of Soviets, eight months before Stakhanov’s famous feat, Ordzhonikidze, after discussing the productivity of cutting machines, praised a Donbass miner, Tel’nykh, who was a delegate at the congress, for achieving a monthly output of 10,000 tons as compared with the average 2,700 tons in the best coal district.¹¹

Such feats were frequently undertaken during the next few months. Z. E. Zorin, head of Artemugol’, a Donbass coal trust, later noted that before Stakhanov’s record shift there were already ‘people who in specific circumstances work better than others’:

I must say straight out that we slept through our own Stakhanov movement. In our mines in June, Medvedev, a coal-face worker, produced 112 tons [per shift], and we did not notice.¹²

Then on July 1, an engine driver on the Donetsk line, Krivonos, increased the speed of his locomotive from 24 to 31.9 kilometres an

⁸ See Rees (1995), 114–18.

⁹ *Ibid.*, 119–20.

¹⁰ Ordzhonikidze (1957), 545–6.

¹¹ *Ibid.*, 619–20.

¹² RGAE, 7297/38/175, 273 (report to conference on the coal, oil, chemical and metallurgical industries, attended by participants in central committee plenum, December 26, 1935).

hour; he was later treated as a Stakhanovite, or a 'Stakhanovite-Krivosite', jointly with Stakhanov himself.¹³

The circumstances of Stakhanov's own record on the night of August 30/31 have been much discussed. While we lack full documentary evidence about the launching of Stakhanov's record, and the organisation of the subsequent campaign, we can reconstruct certain important elements of the story. Stakhanov's feat was inspired by the general atmosphere, in which the intensification of labour was strongly encouraged, and active preparations were made for the occasion by the party organisation in the mine.¹⁴ But the evidence seems to show that Stakhanov's action was not directly organised by the Politburo, or by Stalin himself. Stalin was on vacation, and there was nothing about Stakhanov or his record shift in the numerous ciphered telegrams exchanged between Kaganovich and Stalin. In the Stalin-Kaganovich telegrams the sole mention of the movement (without any reference to Stakhanov himself) was a paragraph in Kaganovich's telegram of September 5, 1935, in which he took the opportunity to inform Stalin about the success of locomotive drivers in speeding up the trains.¹⁵ But Stalin apparently made no response. Probably Ordzhonikidze enthusiastically wrote to Stalin or telephoned him about the developments in heavy industry; but no record of this has so far been traced.¹⁶ If there was a prime mover in the campaign, it was certainly Ordzhonikidze himself, strongly supported by his deputy Pyatakov.

At the beginning of August, after struggling for the interests of Narkomtyazhprom in the discussions on the 1936 plan, Ordzhonikidze departed on vacation to Kislovodsk. He travelled through the Donetsk region by train, and received S. A. Sarkis (Sarkisov), secretary of the Donetsk regional party committee, and Zorin, head of Artemugol', in his coach.¹⁷ After they had complained about the lack of supplies, he promised to help, and at the same time asked them to pay proper attention to the work of miners who were showing the way forward (*shakhtery-'mayaki'*, literally 'beacons'), the 'thousands' of leading miners in the Donbass.¹⁸

¹³ See Rees (1995), 123.

¹⁴ See Siegelbaum (1988), 67–9.

¹⁵ RGASPI, 558/11/743, 29–36.

¹⁶ Stalin was in Sochi, Ordzhonikidze on the northern side of the mountains in Kislovodsk and Zheleznovodsk.

¹⁷ Owing to the large number of aircraft disasters, the top leaders were not permitted to travel by air.

¹⁸ RGASPI, 85/29/119, 114.

A few weeks later Ordzhonikidze, on vacation in Kislovodsk, read a short item on the last page of the September 2 issue of *Pravda*:

...in a 6-hour shift Stakhanov gave 102 tons of coal, which is 10 per cent of the daily output of the mine, and earned 200 rubles.

(In fact Stakhanov, contrary to the usual practice, did not do his own propping but worked with two proppers, but even so the output per man was 5.23 times the norm.¹⁹) Ordzhonikidze promptly phoned Narkomtyazhprom in Moscow and the coal trust in Kadievka, and within a few days a campaign about Stakhanov's record was organised in the central newspapers. On September 6, *Pravda* published an enthuasiastic report about the records achieved by Stakhanov and Dyukhanov, a local party organiser who visited the mine where Stakhanov worked. On the same day Ordzhonikidze also wrote to Sarkisov, not mentioning Stakhanov specifically, but setting out his thoughts and plans:

Sarkis – the coal situation, and the fuel situation generally, is bad. It is clear to me today that the management of both Glavugol' and the trusts is bad. This is mainly managers of the old type. They must either be sharply reoriented and compelled to work in a new way, as we did in iron and steel – or be replaced by young people ... Tel'nykh and others must be boldly promoted to leading posts.

... You can't get away from the fact that there are hundreds and thousands of real heroes among the rank and file, who demonstrate brilliant models of how to work ... The experience of iron and steel has fully justified such boldness ... We can't manage without a big shake-up in coal. We can't organise wages along new lines, or the workplace, without a shake-up.²⁰

A few days later, on September 11, *Pravda* published an enthusiastic editorial 'An Important Initiative in the Donbass', which launched the national campaign.²¹

¹⁹ See Siegelbaum (1988), 70–1.

²⁰ RGASPI, 85/29/460, 2–3, published in *Sovetskoe rukovodstvo: perepiska, 1928–1941* (1999), 310–11. Tel'nykh was the record-breaker in the Donbass praised by Ordzhonikidze the previous January (see above).

²¹ For a careful account of the campaign, see Siegelbaum (1988), 75–88.

The strong official backing for the Stakhanovite movement had definite political as well as economic objectives. In 1935 numerous initiatives by the leadership were directed towards consolidating the unity of the country. On July 30, a month before Stakhanov's record, Stalin, addressing a major conference of railwaymen, attended by several members of the Politburo, insisted that there were no major and minor personnel on the railways, only major and minor posts – everyone was equally important.²² The Stakhanovite movement became a major part of the campaign for national unity. In October and November 1935 numerous conferences and meetings attended by both Stakhanovites and political and economic leaders were widely publicised, and all the regional and district party secretaries and all the enterprise directors were drawn into the campaign. Then the 'First All-Union Conference of Stakhanovite Working Men and Women' was held November 14–17 in a blaze of publicity, attended by all the members of the Politburo and 3,000 managers of the economy and rank-and-file Stakhanovites. The reports of the proceedings became one of the main propaganda documents of the second half of the 1930s. Stalin, in his address to the conference, which was his first known reference to Stakhanovism, described the Stakhanov movement as 'fundamentally profoundly revolutionary'. According to Stalin, the movement 'began of itself, from below' and 'spread across our Soviet Union not gradually, but with an unprecedented speed, like a hurricane'.²³

At the conference, the Soviet leaders openly manifested what Benvenuti has characterised as 'reverting to the ultra-ambitious economic expectations of the early Thirties'.²⁴ Ordzhonikidze, reviving a major slogan of the first five-year plan, called for the fulfilment of the second five-year plan in four years in the Donbass coal industry.²⁵ Gurevich, head of the iron and steel industry, drew attention to the campaign for 'the five-year plan in four' in his industry; and the director of the Kirov works in Leningrad stated

²² Cited by Kaganovich in *Perloe* (1935), 189. For other aspects of this speech see Rees (1995), 122.

²³ P, November 22, 1935; Stalin, *Soch.*, xiv (1967), 80, 87–8.

²⁴ Benvenuti (1989), 24.

²⁵ See his exchange with Artyukhov, head of the Gorlovka mine (*Perloe* (1935), 47).

that his factory would achieve ‘five in four’.²⁶ Molotov went much further. After insisting that ‘*every worker can become a Stakhanovite*’, he announced:

The productivity of our works and factories will secure us within a short period a doubling and trebling of industrial output, as comrade Stalin has pointed out so many times.²⁷

Ordzhonikidze, not to be outdone, insisted that it was possible to achieve ‘without any doubt the doubling, trebling and quadrupling of the productivity of labour and production, as cde. Stalin said – this matter is in our hands’.²⁸

Stakhanovism was the main item on the agenda of the plenum of the party central committee, which met December 21–25, 1935 (see pp. 171, 182 below), and was widely publicised. At this time Stalin was personally active to an unprecedented extent in ‘communicating with the people’. He held a series of meetings with delegations of workers and peasants, and representatives of various Soviet republics.²⁹ A remarkable *Pravda* editorial on January 1, 1936, entitled ‘The Stakhanovite Year’, and accompanied by a large photograph of a smiling pipe-smoking Stalin, boldly declared that ‘the Soviet land is advancing to abundance at a rapid pace’:

The country has never lived so full-blooded a life as at present. Vivacity, confidence and optimism are universally dominant. People are as it were taking to wings. The country is in process of becoming not only the richest but also the most cultured in the entire world. The advance of the working class to the level of professional engineers and technicians is on the agenda.

²⁶ *Pervoe* (1935), 108, 133. See also Zhdanov on some Leningrad factories (*Pervoe* 299). However, the independent-minded Tochinskii insisted, contradicting Ordzhonikidze, that the major iron and steel works at Enakievo was not ready to fulfil the five-year plan in four years; Ordzhonikidze in reply asserted that the iron and steel plan would be ‘considerably exceeded’ in four years (*ibid.* 150, 318).

²⁷ *Ibid.* 281. The comment on Stalin evidently referred to his speech of May 4 (see p. 157 above).

²⁸ *Ibid.* 324.

²⁹ For his similar meetings concerned with agriculture, see p. 263 below.

The editorial closely linked this alluring prospect to the question of labour productivity:

Every newly emerging social system triumphs over the old outdated mode of production because it brings about a higher productivity of labour.

(iii) Stakhanovism and the campaign against 'sabotage'

The extent to which Stakhanovism was resisted and resented by workers, managers and engineers has yet to be established. The hostility of some ordinary workers was frequently described in NKVD and party reports in the autumn of 1935.³⁰ There is also a great deal of evidence that many senior managers, factory directors and engineers regarded Stakhanovite record-breaking as disrupting planning and the progress of the economy. The scepticism of some leading industrialists was clearly displayed at a meeting in Narkomtyazhprom of heads of Chief Administrations and chief engineers on October 15, 1935.³¹ And in the factories foremen and engineers were harassed by managers to increase the number of Stakhanovites, and by Stakhanovites for failing to supply the extra tools and materials to enable higher production.³²

In the autumn of 1935, resistance to Stakhanovism met an increasingly repressive response from the authorities, who often linked even mild resistance with counter-revolutionary activity and sabotage. As early as September 14 *Pravda* published a telegram by Ordzhonikidze in which he anticipated 'philistine scepticism on the part of certain backward leaders, which will in practice mean sabotage', and called for their immediate removal.³³ Then on September 20 a *Pravda* editorial was headed 'Fire on the Saboteurs!' On November 17 Stalin, in his speech at the Stakhanovites' conference, while he did not specifically mention 'sabotage', called for 'the curbing of stubborn conservatives among the managerial, engineering and technical staff', at

³⁰ See S. Davies (1997), 32–4.

³¹ See Benvenuti (1989), 31–2; RGAE, 4372/38/180, 93–283.

³² These issues are extensively discussed in Khlevniuk (1995); Filtzer (1986), ch. 7; Getty and Manning, eds (1993), 142–60 (R. Thurston), as well as in Benvenuti and Siegelbaum.

³³ The telegram was dated September 12.

first by patiently persuading them, and then, 'if persuasion does not work, more decisive measures will have to be taken'.³⁴

On November 26 Vyshinsky, the USSR Procurator, claimed that on the railways a Stakhanovite had been attacked, and attempts had been made to organise a 'wrecking act' to discredit Stakhanovism. He proposed that the case should be heard in open court and the two main persons accused should be sentenced to death by shooting.³⁵ On November 29 the question was examined by the Politburo: Stalin personally replaced the proposal to impose the death penalty by ten years of imprisonment.³⁶ On December 10 and 16 Vyshinsky informed Stalin and Molotov, and Kaganovich (as commissar for railways) that each of the accused had been sentenced to 6–10 years' deprivation of liberty. According to Vyshinsky, the trials were attended by a large number of railwaymen, who showed 'strong approval' of the sentences; the trials were broadcast by radio and reported in the local press.³⁷ A copy of one of Vyshinsky's letters to Molotov is located in the files of Chubar's secretariat, and Molotov has noted on it 'Cde. Chubar' for inf[ormation]'.³⁸ This is evidence that the political leadership of the USSR were informed about the attacks on Stakhanovism and took them seriously.

At the beginning of December Vyshinsky issued a circular requiring the following to be treated as acts of terrorism:

the use of forcible actions against Stakhanovites in connection with their activity, actions which result in their death or other serious consequences;
attempts or preparation for such actions.

Damage of machine tools and other mechanisms, undertaken to disrupt the work of Stakhanovites, should be treated as wrecking or as a 'diversionary act'. 'Deliberate hindrance of the activity of Stakhanovites by official persons' should be treated as counter-revolutionary sabotage. Thus anti-Stakhanovite acts were brought

³⁴ P, November 22, 1935.

³⁵ GARF, 8131/37/58, 20–21.

³⁶ RGASPI, 17/163/1086, 60, 61–63. The resolution was approved by poll, with the signatures of Stalin, Molotov, Ordzhonikidze, Mikoyan and Kaganovich; Voroshilov, Chubar' and Andreev informed the secretary of their approval.

³⁷ GARF, 8131/37/58, 89–90, 99.

³⁸ GARF, 5446/26/49, 277.

under the most severe clauses of the Criminal Code, carrying punishments including the death penalty. Further, 'threats against, and persecution and beating' of Stakhanovites should also carry severe penalties. All such cases should be widely publicised, and should be tried in open court sittings in the presence of a wide public, and reported in the local press.³⁹

Andreev, a secretary of the party central committee and Politburo member, in preparing for the central committee plenum of December 21–25, at which he gave the keynote speech, was supplied with a considerable amount of NKVD material on the resistance of 'conservative and counter-revolutionary elements' to the Stakhanov movement. The material indicates that by December hundreds of cases of sabotage had already been discovered or concocted. The NKVD used the following headings to describe resistance to Stakhanovism: deliberate damage of the equipment of Stakhanovites; creation of unfavourable conditions for their work (including supplying them with poor-quality tools and materials, and allocating inappropriate personnel to Stakhanovite work-teams); illegal reduction of rates for the job and increases of norms; 'deception' by economic agencies (this obviously refers to inaccurate reports); 'counter-revolutionary agitation against Stakhanovite methods'; terror against Stakhanovites.⁴⁰

Such broad headings enabled accidents, damage of machinery and poor quality materials – frequent occurrences in the Soviet industry of the 1930s – to be treated as crimes. Thus a report to Andreev dated October 11 claimed that the collapse of the mine roof and the consequent death of nine of the 14 members of a Stakhanovite brigade at Mine No. 204 in the Chelyabinsk Coal Trust was 'a result of the use of obviously wrecking methods of organising mining'; six engineers were found guilty of wrecking.⁴¹ Cases were reported in the legal journal, and in the industrial newspaper, of workers receiving sentences of 2–5 years' imprisonment merely for strongly criticising Stakhanovism.⁴²

Andreev's address to the central committee plenum discussed the question of sabotage in this spirit. He insisted that it was 'impossible to avoid the decisive opposition of class enemies' and that

³⁹ GARF, 8131/37/58, 32–34.

⁴⁰ RGASPI, 73/1/141, 205.

⁴¹ RGASPI, 73/1/141, 241.

⁴² See Filtzer (1986), 204.

‘numerous facts, known to everyone, inform us of the more determined struggle of class enemies’. He claimed that much sabotage had taken place but had not been disclosed, because (a revealing remark) ‘no-one now dares to speak openly against the Stakhanov movement’.⁴³ Some other speakers also claimed that Stakhanovism was hindered by sabotage. Thus Ryndin, from the Urals, referred to ‘many facts of open and secret sabotage’ on the railways, adding that ‘Many people have already been exposed and driven out – there were unfortunately quite a number of Communists among them.’⁴⁴ But on the whole the theme of sabotage was rather muted. Ordzhonikidze criticised the conservatism of ‘many and very many’ managers, engineers and technicians, but did not refer to sabotage.⁴⁵ The resolution of the plenum stressed the importance of ‘breaking the remaining resistance to the Stakhanov movement of the conservative section of managers, engineers and technicians in all branches of industry and transport’, and called upon party and trade union organisations to ‘expose class-alien elements which attempt to do harm to (*pakostit'*) Stakhanovites’.⁴⁶ But it did not explicitly mention sabotage. At a Narkomtyazhprom conference, held on December 26, a day after the plenum, the participants, including Ordzhonikidze, paid no attention to the question of sabotage.⁴⁷

These developments were characterised by Benvenuti as ‘the December truce’, which showed ‘signs of reconciliation between industry and the authorities’.⁴⁸ While this is an accurate characterisation of the change in attitude of Ordzhonikidze and probably some of the other senior People’s Commissars, in practice accusations of sabotage and counter-revolutionary activity did not cease, and in some sectors were even intensified.

⁴³ P, December 29, 1935.

⁴⁴ RGASPI, 17/2/561, 32.

⁴⁵ P, December 27, 1935.

⁴⁶ P, December 26, 1935.

⁴⁷ For this conference see Rees, ed. (1997), 120 (Khlevnyuk); Benvenuti (1989), 75–6. This was a conference of participants in the plenum concerned with the coal, oil, chemical and metallurgical industries. The report of its proceedings appears, in somewhat different versions, in ZI, December 31, 1935; RGASPI, 85/29/114; and RGAE, 7297/38/175, 46–275.

⁴⁸ Benvenuti (1989), 35, 40.

(B) THE END OF FOOD RATIONING, OCTOBER 1, 1935

The abolition of all food rationing was firmly on the agenda by August 1935. On August 2 Molotov, who was on leave, wrote to Stalin:

Are we intending to go to the abolition of ration cards for food and industrial goods this year? It seems to me that this is what must be done, It is necessary that wages should really become the main regulator for the growth of labour productivity.⁴⁹

Three days later Stalin replied: 'You are of course right about the full abolition this year of ration cards for industrial goods and food; this matter must be carried to a conclusion.'⁵⁰

Preparation for the more or less complete abolition of food rationing began early in September. On August 31, Stalin, in a telegram to Kaganovich and Molotov, stressed the urgency of reducing the price of bread and flour, particularly in Central Asia: 'this is in order to make it unprofitable to grow grain and compel them to transfer almost all their land to the production of cotton'.⁵¹ A few days later Molotov and Kaganovich replied to Stalin outlining proposals about reduced bread and flour prices, and adding the important qualification that 'we are thinking of tying in the whole question with the abolition of ration cards for meat, sugar and fish'. They stated that they would prepare the matter within 'about five days'.⁵² However, other work evidently got in the way, because nothing happened for two weeks. On September 19 Stalin chided them in a brief telegram:

Where is your draft on the reduction of bread prices and the abolition of rations for meat and sugar? You must hurry up.⁵³

The telegram was despatched at 9.07 p.m. Kaganovich and Molotov must have worked through the night. On September 20 at 6.05 a.m. they sent him a very long telegram on both subjects.⁵⁴

⁴⁹ RGASPI, 558/11/769, 162–164.

⁵⁰ *Pis'ma* (1996), 257. On the attempted derationing of industrial consumer goods, see pp. 226, 349 below.

⁵¹ SKP, 543.

⁵² SKP, 552 (dated September 5).

⁵³ SKP, 573.

⁵⁴ SKP, 573–7.

The section on the abolition of rationing proposed that unified prices should replace commercial and ration prices for meat products, fish, herrings, potatoes and sugar. The prices were set out in some detail. They were lower than the existing commercial prices. The unified price for meat was about double the ration prices for meat, and the sugar price was treble the ration price for sugar, but the new price for potatoes was only slightly higher than the ration prices for potatoes prevailing after the 1934 harvest. Prices of meat dishes in canteens would also be increased, but the increase would be limited (evidently they feared a further drop in canteen sales) by reducing the meat content of the meals. For the time being fats would continue to be rationed. The new prices would be differentiated by zone, and would be lower in Moscow, Leningrad and the Donbass than elsewhere. The sale of meat would be concentrated in towns previously supplied with rationed meat.

Stalin sent Kaganovich and Molotov a further telegram at 3.40 p.m. on the same day, September 20, objecting to the scrappy nature of their telegram and castigating their proposal to fix meat prices lower in Moscow, Leningrad and the Donbass as ‘fundamentally incorrect’: ‘this approach returns us to the old anti-marxist practice when products were cheaper in Moscow and Leningrad than in the places where they were produced’. He also insisted that rationing of butter should be abolished – a ‘serious reduction’ should be made in its price (obviously referring to the commercial price). However, he raised no objection to the similar price differentiation proposed for sugar and fish.⁵⁵ His proposals were immediately accepted by Molotov and Kaganovich, and incorporated in a decree of the central committee and Sovnarkom, which was approved by the Politburo on September 25 and published the following day.⁵⁶

The decree, entitled ‘On the Reduction of Prices for Bread and the Abolition of the Rationing System for Meat, Fish, Sugar, Fats and Potatoes’, took effect from October 1.⁵⁷ It declared:

The upsurge in livestock farming, the increased yield of sugar beet, and the strengthening and development of the fish industry have now created all the necessary conditions for the elimination of the rationing system for meat, fats, fish, sugar and potatoes ... [This] must

⁵⁵ SKP, 577.

⁵⁶ SKP, 580 (dated September 22); RGASPI, 17/3/971, 61, 140–149.

⁵⁷ SZ, 1935, art. 422; for the reduction of bread prices see pp. 175–6 above.

eliminate the existence of dual prices – high commercial prices and ration prices which are too low – and secure the establishment of unified state selling prices for each region or republic at a level between the present commercial and ration prices.

Five Zones were approved for meat, fish and dairy products (though with different areas covered for each product) and four Zones for sugar, as compared with eight Zones for bread.⁵⁸ As Stalin proposed, prices were higher in the Zone containing Moscow, Leningrad and the Donbass than in all other Zones except the Far East. No special addition to wages was provided for; the authorities claimed that the net effect of the reform was to reduce the prices paid by the population (see pp. 233–4 below).

On September 5, in response to Stalin's anxiety about the price of bread and flour in the cotton areas (see p. 173 above), Molotov and Kaganovich had proposed that bread and flour prices should be reduced on September 25 by between 20 and 40 per cent, depending on the area and the type of grain.⁵⁹ In his reply on the following day, Stalin insisted that all price reductions, including those for Central Asia, should be introduced in all regions on October 1, at the same time as the abolition of food rationing.⁶⁰ In their long telegram of September 20, Molotov and Kaganovich had already set out detailed proposals for bread prices, including larger reductions in Central Asia and the Far East.⁶¹ Stalin expressed doubts about reducing the price of rye bread by as much as 20 kopeks, and objected to the larger reduction proposed for the eighth (Far Eastern) Zone as 'economically incorrect'.⁶²

The decree of September 25 reduced the retail price of bread by between 7 and 25 per cent, depending on the Zone, and of flour by between 13 and 33 per cent.⁶³ As a concession to Stalin, the reduction for rye bread varied between 15 and 20 kopeks according to the region, and the reduction in the Far East was not greater than in other regions.

⁵⁸ For meat and meat products, the *towns* to which meat was supplied were divided into zones; for other foods administrative regions were each placed in a zone.

⁵⁹ SKP, 552 (dated September 5).

⁶⁰ SKP, 556.

⁶¹ SKP, 574.

⁶² SKP, 577. About rye bread he wrote: 'The reduction for rye bread by 20k is very large, but since you have adopted such a large reduction I do not object.'

⁶³ SZ, 1935, art. 422 (dated September 25).

The reduction in bread prices may have been made out of necessity. With the decline in prices on the kolkhoz market it may have become more difficult to sell bread from state shops; according to trade statistics sales declined by 17 per cent in July–September 1935 as compared with April–June; in the previous year the decline in the same quarter was only 9 per cent.⁶⁴

Kaganovich, reporting the publication of the decree to Stalin, informed him that ‘today meetings and talks are taking place in every factory’, and added complacently:

the attitude of manual and office workers is very good ... many workers made a calculation and themselves pointed out that, as they bought meat and butter on the market, they are now gaining.⁶⁵

(C) THE OCTOBER–DECEMBER ECONOMIC PLAN AND ITS OUTCOME

(i) *The quarterly plan*

In September the quarterly national-economic plan was approved before the decision to abolish all food rationing and before the Stakhanov movement had substantially affected economic policy and the economic atmosphere. But it was prepared against the background of the considerable successes of industry and the railways, and in the context of the series of decisions to increase the investment plans both for the remainder of 1935 and for 1936.⁶⁶

The outline plan approved by the Politburo on September 7 was unusually incomplete.⁶⁷ While it included specific plans for a number of producer and consumer goods, some important items were missing, and a dispute about the plan for cotton textiles was referred to a special commission. A couple of weeks after the initial approval of the plan, a further Politburo decision increased the plan for industrial

⁶⁴ See quarterly data for 1934 in *Itogi ... po tovarooborotu*, July 1935, 16–17, and for 1935 in *Osnovnye pokazateli*, 1935, 225.

⁶⁵ SKP, 589 (dated September 26).

⁶⁶ For the 1936 plan, see p. 268 below.

⁶⁷ RGASPI, 17/3/971, 18–19, 89–94.

production by 1.9 per cent.⁶⁸ A much more detailed plan was approved by Sovnarkom on September 26.⁶⁹ Other plans were increased on the authority of the commissariat: the plan for Donbass coal was increased from 18.5 to 20 million tons.⁷⁰

The capital investment plan for the fourth quarter involved a further increase in the annual plan for 1935. On September 6 Kaganovich reported to Stalin by telegram that 4,507 million rubles remained for the quarter from the annual plan, but an additional 732 million rubles were required. Agriculture and transport needed to purchase equipment produced in excess of the plan, and additional expenditure needed to be undertaken on meat combines, food warehouses and the textile industry. Additional investment was also required to prepare for further school building in 1935, to mechanise the transport of timber, and for the most important projects of heavy industry. Investment for the quarter should therefore total 5,239 million rubles. (This figure excluded the bread supplement, which brought the total to 5,369 million rubles.) Reflecting the expansive mood of the time, Stalin replied on the same day without querying any of the items proposed, merely stating ‘I do not object to the additions to the ceilings for the IV quarter which you propose’, and this figure was included in the quarterly plan adopted on September 7.⁷¹

⁶⁸ RGASPI, 17/3/971, 64, dated September 25 (art. 211). The quarterly plans for the gross production of industry were changed as follows (million rubles at 1926/27 prices):

	<i>September 7</i>	<i>September 25</i>
Narkomtyazhprom	6800	6870
Narkomlegprom	1600	1722
Narkompishcheprom	2000	2080
Narkomles	600	603*
Narkoms of local industry	1800	1881
(Other)	(700)	(601)+
Total	13500	13758

* Given in the Sovnarkom decree of September 26 (see next footnote).

+ Given in the Sovnarkom decree of September 26 as including Komzag 562, cinema and photography 39.

⁶⁹ GARF, 5446/1/171, 241–87 (art. 2170).

⁷⁰ See Siegelbaum (1988), 74.

⁷¹ SKP, 555–6. For the wage addition, see RGASPI, 17/3/971, 93.

However, this decision reflected the uncertainties of the information about investment available to (or comprehended by) the Soviet leaders. Although Kaganovich and Stalin were apparently unaware of this, the increase proposed was purely nominal. In fact the investment plan had been consistently underspent in 1935 up to that time. Three months after the quarterly plan was approved, Ginzburg, in charge of investment in Narkomtyazhprom, reported to the builders' conference that total investment in January–September 1935 had amounted to 15,257 million rubles.⁷² As the annual plan was 24,482 million rubles (see p. 158 above), as much as 9,245 million rubles of the annual plan had therefore not yet been spent! The monthly reports for investment in a substantial number of sites had shown underexpenditure throughout 1935. (See p. 142 above.)

(ii) *Industrial production and costs in practice*

The vociferous campaign extolling the first successes of Stakhanovism was encouraged by the exceptionally rapid growth of production in a number of key industries. In coal and iron and steel, and in favoured branches of engineering such as the tractor and automobile industries, production increased much more rapidly between August (the last month before Stakhanov's feat) and December 1935 than in the same period of 1934:

Increase in production, August–December (per cent)⁷³

	1934	1935
Coal (tons)	15.3	28.2
Pig iron (tons)	2.1	6.9
Crude steel (tons)	10.5	15.6
Rolled steel (tons)	10.4	32.4
Vehicles (numbers)	22.6	31.5
Tractors (numbers)	6.9	30.5

While such remarkable results were not achieved throughout industry, this was certainly an outstanding period for industry as a whole. In October–December 1935 production was 25.2 per cent greater

⁷² *Soveshchanie* (1936), 53.

⁷³ Estimated from monthly data in *Osnovnye pokazateli*, 1935, xxi–xxvi.

than in the same period of 1934 and 27.5 per cent greater than in the previous quarter. The October–December quarter was responsible for as much as 32.1 per cent of annual output; the equivalent figure for 1934 was 28.9 per cent.⁷⁴

In value terms, total gross production amounted to 14,876 million rubles, substantially exceeding the plan of 13,758 million. The four main industrial commissariats all exceeded their plan.⁷⁵ As always, these figures in value terms present a more favourable picture than those in physical terms. The annual report of TsUNKhU lists the results in physical terms for 36 of the items for which plans were approved by the Politburo on September 7. Of these, 17 exceeded the plan, 18 did not reach the plan and one exactly equalled the plan. The main lag was in the production of coal, oil and building materials, though all these items increased substantially. In the fuel and power group production declined in the quarter only in the case of petrol. In contrast to previous years, most food products and industrial consumer goods exceeded the plan.⁷⁶

The increase in production was associated with, and depended on, a rapid increase in labour productivity. In Narkomtyazhprom as a whole, output per worker was 13.4 per cent greater in the fourth than in the third quarter, and 36 per cent higher than in 1934 as a whole, thus exceeding the quarterly plan.⁷⁷ This increase was to a substantial

⁷⁴ *Osnovnye pokazateli*, 1934, 3; 1935, 4.

⁷⁵ *Osnovnye pokazateli*, 1935, 4; for the plan, see n. 68 above. The commissariats for local industry slightly underfulfilled their plans.

⁷⁶

	<i>Exceeded plan</i>	<i>Lower than plan</i>	<i>Equalled plan</i>
Fuel, power, industrial raw materials	2	8	0
Building materials	0	3	0
Chemicals	2	0	1
Machine building and metalworking	5	4	0
Industrial consumer goods	3	1	0
Food products	5	2	0
Total	17	18	1

Sources: Based on comparison of data in *Osnovnye pokazateli*, 1935, 18–25 and RGASPI, 17/3/971, 89–91 (dated September 7).

⁷⁷ The quarterly plan approved by Sovnarkom states that productivity in October–December should exceed the average level for 1934 as a whole by 28 per cent (GARF, 5446/1/171, 242, dated September 26).

extent the result of the pressure exerted on managers, engineers and workers by the Stakhanovite campaign. At first this mainly involved the encouragement of individual records. The press extolled the success and the virtues of Stakhanov and other coal miners, Busygin, who produced crankshafts at the Gor'kii automobile works, Gudov, a machine miller, Smetanin, who manufactured footwear in Leningrad, the train driver Krivonos, and the sisters Vinogradova, who tended cotton textile looms in Vychuga.⁷⁸ For heavy industry alone, record holders were celebrated by the publication of a two-volume work in their honour; 647 names were listed for November alone.⁷⁹ Before the end of the year the movement was extended to embrace much larger numbers of workers: in December Stakhanovite shifts and Stakhanovite days were organised in the Donbass mines.⁸⁰

The achievement of higher productivity was encouraged both by the high prestige attached to the record holders and by the high earnings involved in large increases in output. Many workers were paid by progressive piece rates: once a worker had fulfilled 100 per cent of the norm, the increment to wages increased more rapidly than productivity. In the Donbass, 31.8 per cent of all mine workers were paid by progressive piece rates in September and this increased to 32.7 per cent by December.⁸¹ This carried with it serious problems for financial stability. In a joint memorandum dated December 19, Grin'ko and Mar'yasin pointed out that the wage bill in October–November 1935 was 8.1 per cent higher than in August–September, whereas in the same period of 1934 the increase had been only 5.1 per cent. The authors of the memorandum noted 'the rapid development of labour productivity, breaking down the old, outdated output norms, and sharply increasing earnings'.⁸²

Ever since the late 1920s the wage system had been constructed on the premise that labour productivity would rise more rapidly than wages. This was to be achieved by the annual upward revision of norms of output (i.e. cutting the rate for the job), plus *ad hoc* upward revisions when new equipment was introduced. It proved extremely difficult to maintain this policy in practice. In 1934, according to official figures, industrial labour productivity rose by 11.0 per cent, but the

⁷⁸ See Siegelbaum (1988), 76.

⁷⁹ See *ibid.* 76–8.

⁸⁰ See *ibid.* 101.

⁸¹ *Tyazhelaya promyshlennost' 1935* (1936), 234.

⁸² GARE, 5446/17/341, 20–22; for this memorandum see pp. 190–1 below.

average wage in industry rose by 16.3 per cent.⁸³ In 1935 the average wage sharply increased at the beginning of the year following the abolition of bread rationing, but, following the norm revision of March–April, wages grew less rapidly in the second and third quarters.⁸⁴

The Stakhanov movement widened the gap between wages and productivity. In the first months of the campaign the press was full of reports of the huge wage increases received by Stakhanovites, and attempts to increase output norms were slapped down.⁸⁵ On October 11 the industrial newspaper *Za industrializatsiyu* reproduced the norms decision of the previous March, printing in bold type the clause ‘The revision of out-of-date norms shall be completed not later than 1 May 1935 and the revised norms shall be fixed for a period of 1 year.’ At a Narkomtyazhprom conference on October 15, 1935, Pyatakov peremptorily told Rataichak, the head of the chemical industry: ‘if you want to wreck the Stakhanov movement, revise the norms’.⁸⁶ Between August and December 1935 the average daily wage of industrial workers increased by 16 per cent, while in the same months of 1934 it had increased by only 5.0 per cent.⁸⁷ The monthly wage of industrial workers in October–December as a whole exceeded the July–September level by 21.4 per cent and was 28 per cent greater than in the same months of the previous year.⁸⁸

This situation could not last. At the conference of Stakhanovites in November, many speakers criticised the old norms for both equipment and workers’ output as out-of-date and superseded. But it fell to Stalin to state that the norms of output must be increased. In the final speech of the conference, he insisted that ‘a planned economy is impossible without norms’; norms were needed as ‘a great controlling force’ to bring the mass of the workers up to the level of the

⁸³ See *Narodno-khozyaistvennyi plan 1935* (1935), 442–3, 637, and Zaleski (1980), 550, 562.

⁸⁴ As compared with the same period of the previous year, the average wage rose by 28.3 per cent, and productivity by only 11 per cent over the whole period January–September (*Osnovnye pokazateli*, September 1935, 21–3; *Osnovnye pokazateli*, 1935, 59–61). These figures are for the increase in the daily wage as compared with daily productivity.

⁸⁵ See Siegelbaum (1988), 88, and *Industrializatsiya SSSR, 1933–1937 gg* (1971), 284–5.

⁸⁶ See SS, vol. 36 (1984), 60 (Siegelbaum), Siegelbaum (1988), 87, Benvenuti (1988), 191–2; and RGAE, 7297/38/180, 153–154.

⁸⁷ See data in *Osnovnye pokazateli*, January 1936, 142.

⁸⁸ *Osnovnye pokazateli*, January 1953, 142.

most advanced. But norms must be increased. It would be unrealistic to fix them at the level reached by Stakhanovites; because the mass of workers would be unable to achieve them, *but*:

We need technical norms which would be placed somewhere between the present technical norms and the norms achieved by the Stakhanovs and the Busygins.⁸⁹

One of the main purposes of the December plenum of the central committee was to prepare the ground for the increase of both types of norm. In its resolution Stalin inserted a substantial paragraph calling for the replacement of existing technical norms and output norms as out of date.⁹⁰ Throughout the text of the resolution Stalin replaced ambiguous expressions such as ‘check the norms critically’ and ‘re-examine the norms’ by the specific requirement ‘re-examine the norms in the direction of an increase’.⁹¹

(iii) Capital investment

In the fourth quarter of every year capital investment was subject to two conflicting trends. On the one hand, every Soviet organisation struggled to improve performance so as to fulfil the annual

⁸⁹ P, November 22, 1935. Stalin used the phrase ‘technical norms’ (*tekhnicheskie normy*) rather than ‘output norms’ (*normy vyrobotki*). The term was used to refer both to norms for equipment and norms of output for workers. It was clear from the context that Stalin was referring to output norms for workers, but evidently some people assumed that norms of equipment should also be intermediate between the old level and the Stakhanovite records. At the central committee plenum in December, Mikoyan delicately corrected Stalin’s ambiguity:

I think that when norms of capacity of equipment and of production capacity of factories are fixed, we must take the indicators of the Stakhanovites as a basis, because technical norms of equipment and norms of output are different things. We cannot revise the capacity norms of equipment and factories every year or two. This is fixed for many years ahead.

(P, December 27, 1935)

⁹⁰ RGASPI, 558/1/3191, 6, 9–10. Some of his insertions were in his own handwriting, others a typewritten text probably prepared on Stalin’s instructions.

⁹¹ *Ibid.* 13–15.

plan. This trend was particularly strong in 1935 when the investment plan was supplemented by a firm plan for the completion of specific projects. On the other hand, the weather dictated that this was a time of seasonal decline in the building industry. In 1935, as in other years, the number of building workers began to decline in November before reaching a low point in the first quarter of the following year. But in 1935 the decline in the fourth quarter, 4.6 per cent, was somewhat less than the decline of 5.7 per cent in the fourth quarter of 1934.⁹² And in 1935 the building industry was supported by an unprecedented increase in the supply of building materials, partly due to the improved performance of the railways.⁹³

In consequence, the preliminary monthly reports showed that investment increased rapidly in the fourth quarter, and more rapidly than in the fourth quarter of 1934. About 6.4 per cent of the annual plan was fulfilled per month in January–June; the percentage improved to 9.1 in both the third and the fourth quarters.⁹⁴ Accurate information about total investment in the whole economy in October–December has not been available, but the final figures for Narkomtyazhprom show the same trend. The amount of investment increased in the quarter and reached 29.2 per cent of annual

⁹² *Osnovnye pokazateli*, January 1936, 158.

⁹³ Building materials carried on the railways, measured in wagon loads per day, were as follows in October–December 1935:

	<i>Number of wagons</i>	<i>Percentage of same month in 1934</i>
<i>(a) Mineral building materials</i>		
October	5788	180.0
November	6995	199.7
December	6816	288.7
<i>(b) Building timber</i>		
October	6104	137.1
November	6301	140.4
December	6480	152.5

Source: *Osnovnye pokazateli*, October 1935, 73; 1935, 110; *Kratkie itogi*, November 1935, 22.

⁹⁴ Estimated from data in *Osnovnye pokazateli*, July 1935, 80–4; October 1935, 115–17; January 1936, 112–15.

investment; in the same period of 1934 investment declined and amounted to 26.1 per cent of annual investment.⁹⁵

This progress was not sufficient to overcome the lag in the first six months of the year. Tumanov, director of the Industrial Bank, reported to the builders' conference in mid-December:

In a number of People's Commissariats this year we can observe considerable progress in increasing the rate of building (Narkomles, Narkompishchprom, Narkomlegprom, Narkomput'). Nevertheless, the whole programme of capital investment as a whole, to judge by the data for 10 months, will not be fulfilled. Obviously in consequence of this the programme for completions will not be fulfilled.⁹⁶

In building, unlike most of the rest of industry, no major advance in labour productivity was achieved in the fourth quarter: in Narkomtyazhprom it increased by only 3.0 per cent as compared with the previous quarter. Stakhanovism had made only minor advances in the industry. At the builders' conference, a bricklayer from Zavodstroï reported that he was the only worker in the industry who received an award out of 140 Stakhanovites.⁹⁷ But the building industry had carried out a Stakhanovite-like feat earlier in the year. In Narkomtyazhprom labour productivity was already 44 per cent higher in April–June 1935 than in 1934 as a whole; this increased to 58.7 per cent in July–September and 60.0 per cent in October–December.⁹⁸ The average wage in the fourth quarter increased by

⁹⁵ Quarterly investment in Narkomtyazhprom, 1934–35 (million rubles in planning prices of the year concerned):

	1934	1935
January–March	1522	1466
April–June	1971	2057
July–September	2131	2392
October–December	1986	2443
Whole year	7611	8358

Source: *Tyazhelaya promyshlennost' 1935* (1936), 295.

⁹⁶ *Soveshchanie* (1936), 230.

⁹⁷ *Ibid.* 223 (Samarin).

⁹⁸ *Tyazhelaya promyshlennost' 1935* (1936), 297.

4.4 per cent, slightly more rapidly than labour productivity, exceeding the average level in 1934 by 43.4 per cent.⁹⁹

(iv) Internal trade after the abolition of all food rationing

The situation for the foods taken off the ration in October 1935 was at first very patchy. In a memorandum to Kaganovich and Molotov about the food trade between October 1 and October 10, the first ten days after the end of rationing, Veitser reported that even though some kinds of fish were not available, ‘the sale of fish in most towns is taking place normally’, and that in most regions the sale of sugar was also taking place normally. But with other products the situation was far less favourable. Veitser described ‘the huge demand for meat in Central Asian towns’, which was explained by the fact that in this area the unified state price was 7.60 rubles per kilogram, while the price on the kolkhoz market was 14–15 rubles. Sales of meat products had considerably exceeded the plan in the majority of towns; Veitser recommended that the number of towns in which state trade in meat products took place should not be increased. The demand for butter and vegetable oil was also high, partly because seasonal supplies were not yet available on the kolkhoz market. In this case Veitser recommended that the sale should be restricted only to the eleven principal industrial towns: ‘in other towns butter and vegetable oil should either not be sold at all or for certain towns a firm daily amount for sale should be approved’.¹⁰⁰

On November 25 Veitser submitted a further memorandum to Stalin and Molotov on the sale of food in the first 45 days since October 1. He reported that retail sales by the state, and sales on the kolkhoz market, had both substantially increased; kolkhoz market prices, particularly for meat and butter, had fallen considerably in the previous two months. In some large towns state sales of meat had been slow because prices were higher than at the kolkhoz market. Sugar was available without interruption in all regions. But sausages, butter and vegetable oil were not available in sufficient quantities outside the major towns; in all other towns a firm ceiling should be placed on sales (Molotov wrote against these points on the

⁹⁹ *Tyazhelaya promyshlennost’ 1935* (1936), 297. Excluding the bread addition, the average wage in October–December exceeded the 1934 level by 26.1 per cent.

¹⁰⁰ GARE, 5446/82/40, 122–118 (dated October 14).

memorandum ‘correct’).¹⁰¹ At the beginning of December Mar’yasin also noted that ‘at present demand exceeds supply to a certain extent for a number of commodities’.¹⁰² In contrast, a few days later Mezhlauk noted that existing retail prices for flour were too high, and that this restricted sales; and similarly ‘at present prices, potatoes in a number of towns, including Moscow, are selling poorly’.¹⁰³

There was an enormous variation in the extent to which the quarterly plan for the ‘market fund’ of planned and controlled foods was fulfilled in different regions. The so-called ‘market fund’ was that part of the supply which was made available to the individual consumer rather than to organisations such as the army, or for processing by industry. ‘Planned and controlled’ goods were those which Narkomtorg distributed centrally; in the case of food the term covered grain products and eight other foods. Of the 28 or 29 regions and republics, the number in which the market fund failed to reach the plan was as follows: butter 18; vegetable oil 22; margarine 27; meat 20; meat products 9; fish (i.e. fish apart from herrings) 18; herrings 12.¹⁰⁴

The uneven availability of food is strikingly illustrated by the data for the sales of major food products in eleven large towns in October–December 1935. Between 19 and 43 per cent of sales took place in Moscow and Leningrad, and between 35 and 76 per cent in the eleven towns.¹⁰⁵ But Moscow and Leningrad between them included only about 14 per cent of the urban population of the USSR and

¹⁰¹ RGASPI, 82/2/684, 96–102.

¹⁰² GARF, 5446/17/341, 113 (dated December 2); for this memorandum see below.

¹⁰³ RGAE, 4372/92/59, 1–7 (dated December 4).

¹⁰⁴ Estimated from data in *Osnovnye pokazateli*, 1935, 231.

¹⁰⁵ The percentages of total sales of the eight listed foods were as follows:

	<i>Moscow and Leningrad</i>	<i>All eleven towns</i>
Butter	39.9	61.2
Vegetable oil	29.5	47.7
Margarine	19.1	31.3
Sugar	23.6	43.1
Meat	48.0	75.7
Meat products	42.2	59.6
Fish	20.1	34.5
Herrings	25.0	47.4

Source: calculated from data in *Osnovnye pokazateli*, March 1936, 230–5.

4 per cent of the total population; the equivalent figures for the eleven towns were about 27 and 7.5 per cent.¹⁰⁶ The concentration of some 40 per cent of meat, meat products and butter in Moscow and Leningrad is a particularly outrageous demonstration of the priority afforded to these two cities.

In spite of these deficiencies, as a result of the successful fulfilment of the deliveries' plans for nearly all food products, the market fund for all eight foods except fish was larger than in October–December 1934.¹⁰⁷ For industrial consumer goods and other 'non-food' commodities the market fund was 23.1 per cent greater than in October–December 1934, and slightly exceeded the plan.¹⁰⁸ Total retail trade by state and cooperative organisations in October–December 1935 exceeded the plan by 6.4 per cent.¹⁰⁹

However, public catering, not included in this figure, continued to perform badly. In October–December prices again increased slightly as a result of the removal of food from sale at low rationed prices, providing a further disincentive to take meals in canteens. In October–December prices per dish increased by 1.9 per cent and were 96 per cent higher than the price per dish in 1934.¹¹⁰ Moreover, the food content of each dish was reduced in this quarter. According to data on major public catering establishments, the number of dishes sold amounted to only 76.8 per cent of the plan and was 17.5 per cent less than in the previous quarter; and public catering even in terms of current retail prices amounted to only 89.9 per cent of the plan.¹¹¹ More complete data also showed that sales in terms of current retail prices declined by 10 per cent as compared with the previous quarter.¹¹²

Taken as a whole, this final stage in the abolition of food rationing achieved a reasonable degree of stability on the consumer market.

¹⁰⁶ For further details see chapter 8, n. 154.

¹⁰⁷ See *Osnovnye pokazateli*, 1935, 225 (measured in physical terms).

¹⁰⁸ *Osnovnye pokazateli*, 1935, 225 (measured in transfer-wholesale prices of 1935).

¹⁰⁹ *Osnovnye pokazateli*, 1935, 226–8. We have not managed to establish whether the quarterly plan took into account the small rise in retail prices consequent upon the abolition of rationing on October 1.

¹¹⁰ Calculated from data on the retail sales in public catering, measured both in current prices and in number of dishes sold (*Osnovnye pokazateli*, March 1936, 281–2). These figures cover 92 per cent of all public catering (for the full figure for 1935, see Table 20).

¹¹¹ *Osnovnye pokazateli*, 1935, 237–8.

¹¹² *Osnovnye pokazateli*, March 1936, 281–2.

This was reflected in the continued decline of kolkhoz market prices in the first months after October 1. On kolkhoz food markets in the towns, average prices in September 1935 were 78.9 per cent of prices in September 1934, and in November 1935 they fell to 71.0 per cent of prices in November 1934.¹¹³

(v) Finance and credit

In the last quarter of 1935, the problem of inflation continued to trouble and vex the authorities. On September 23, the Politburo and Sovnarkom approved a credit plan for the quarter which showed a deficit, compensated by a net currency issue of 200 million rubles during the quarter.¹¹⁴ This meant that net currency issue during 1935, planned at the beginning of 1935 not to take place at all, would amount to 1,496 million rubles.

But even this quarterly plan proved hopelessly inadequate. As early as October 23, the Politburo authorised the issue of 450 million rubles in addition to the approved 200 million. Of this, 150 million was to cover the cost of the increased delivery to the state of cotton, sugar beet, flax and potatoes, and 300 million was for wage advances before the November holidays. These were supposed to be temporary issues, to be returned before the end of the quarter.¹¹⁵ But Gosbank had evidently assumed from the beginning of the quarter that the Politburo decision to issue only 200 million rubles should not be taken seriously. In a memorandum to Stalin and Molotov dated December 2, Mar'yasin announced that the total net issue expected in 1935 was 1,700–1,800 million rubles (implying an issue of 400–500 million in the fourth quarter). He explained that the growth of credit issues by the state was due partly to the increase in prices owing to the abolition of rationing and partly to the growth of production, of state collections of agricultural products, and of trade,

¹¹³ *Osnovnye pokazateli*, 1935, 240–1. The decline occurred in all the major groups: vegetables, meat and dairy products, eggs, livestock and fodder (the sale of grain products in this period was illegal and therefore not included in the index).

¹¹⁴ RGASPI, 17/162/18, 152; the decree (art. 2150/360ss) appears in GARE, 5446/57/38, 75 and (for currency issue) in 5446/57/39, 37.

¹¹⁵ RGASPI, 17/162/18, 181; this decision was embodied in a decree of Sovnarkom dated October 25 (GARE, 5446/57/38, 181 – art. 2389/394ss).

which had led to an increase in stocks of agricultural raw materials and food. He made it abundantly clear that he thought that this increase in currency circulation was legitimate:

Currency issue in 1935 ... has increased the average annual amount of currency in circulation by 19%, while trade turnover has increased by 34%.

Currency issue has grown more slowly than trade turnover because, as in the previous year, the rate of circulation of money has increased. Every ruble issued by the bank circulated 6.63 times during 1933, 8.05 times in 1934, and 9.29 times in 1935 – i.e. the increase in 1935 as against 1934 is 15%.

The amount of currency issued during the year must be considered entirely legitimate, justified by the growth of agricultural collections and trade turnover. The reduction of market prices is one of the best indicators of the further strengthening of the ruble.

Mar'yasin also advocated a net increase in currency in 1936 amounting to a further 1,000–1,300 million rubles.¹¹⁶

This was a most unusual and striking criticism of the currency and credit policies of the Politburo. Throughout 1934 and 1935 Mar'yasin had displayed objectivity and independence in his secret reports to the Politburo, and as head of Gosbank had taken important financial decisions firmly into his own hands. This assertion of the authority of Gosbank had not endeared him to Grin'ko, another independent spirit, and head of Narkomfin to which Gosbank was administratively subordinate. On October 25, 1935, Grin'ko sent a memorandum to Molotov, with a copy to Mezhlauk, 'on the question of the mutual relations between Narkomfin and Gosbank'. He declared that these relations

are now completely intolerable in character – every kind of joint work between Narkomfin and Gosbank has ceased, and, contrary to the existing statute of Gosbank, all possibility of the carrying out of any supervisory functions by Narkomfin is excluded.

¹¹⁶ GARE, 5446/17/341, 108–15.

He complained that ‘until the beginning of 1935 we always prepared and discussed all major financial questions jointly with Gosbank’, but that now

cde. Mar’yasin not merely bases himself on the viewpoint that the State Bank is completely independent, and defends this viewpoint to the government; in fact on his own authority he puts this viewpoint into practice.

Thus Gosbank did not discuss its quarterly credit plans with Narkomfin, and Narkomfin was not sent documents about them; they were sent to Sovnarkom and Gosplan before they were received by Narkomfin. Grin’ko submitted a draft decree which restored the old practices. Its most important point was that

the question of the issue of currency in excess of the plan or the withdrawal of money from circulation in excess of the plan shall be raised by Gosbank with the central committee and Sovnarkom, by agreement with Narkomfin, only after a joint discussion of the question of the amount, period and purpose of the issue or withdrawal of currency.

Evidently the immediate inspiration for this sharp memorandum was the Politburo decision to issue additional currency, which was made four days later.¹¹⁷

The urgency of the currency problem was such that, two months later, following Mar’yasin’s memorandum of December 2, a reconciliation was effected between Grin’ko and Mar’yasin, and they jointly signed a further memorandum to Stalin and Molotov, the first sentence of which read ‘The course of the fulfilment of the economic plan of the 4th quarter has created additional demands for currency issue.’ The memorandum explained:

Gosbank was permitted to issue 600 million rubles in the 4th quarter of 1935, providing, however, that 400 million rubles of this was returned in December and the 4th quarter should end with a net issue of 200 million.

¹¹⁷ GARE, 5446/29/11, 81–5; the document was marked ‘secret’ and (in Grin’ko’s handwriting) ‘urgent’.

However, by December 15 the bank was compelled not only to leave the 600 million rubles in circulation but also to use fully its 3 per cent right, so by December 15 the issue in the 4th quarter amounted to 781 million rubles ...

... We ask you to sanction a total issue of 750 million rubles in the 4th quarter.

Even this level of currency issue would require urgent measures to increase the sale of sugar, soap, confectionery, herrings, meat, sausages, butter and vegetable oil in the remaining ten days of December.

The '3 per cent right' of Gosbank, previously mentioned by Mar'yasin in a memorandum of February 23, is a reference to a decree of the Council of Labour and Defence, adopted on October 28, 1927, which entitled Gosbank to issue without permission currency amounting to 3 per cent of the total circulation in any month. We return to this matter below. Grin'ko and Mar'yasin attributed the need for extra currency to two main factors: the need to pay for state collections of cotton, sugar beet and other industrial crops in excess of the plan; and the successful development of heavy industry, which had resulted in an unusual increase in the wage bill (see p. 181 above).¹¹⁸

Three days after the despatch of this memorandum, on December 22, the Politburo agreed that the net currency issue in the 4th quarter could amount to 700 million rubles, stipulating that this amount must not be exceeded. It also resolved 'to reprove (*ukazat'*) Grin'ko and Mar'yasin for insufficient and belated measures on the cash deficit in Gosbank and the over-issue of currency'.¹¹⁹ This revised plan proved realistic: currency issue in the fourth quarter amounted to 680 million rubles (see Table 21).

The scandal of the unauthorised currency issue in October–December 1935 continued to reverberate after the end of the year. It was investigated by the party central control commission, and on March 31, 1936, its chair, Antipov, submitted a report which found that Mar'yasin had drawn up the credit plan of the fourth quarter without any intention of keeping to the 200 million ruble currency limit. He had planned on the assumption that the issue would amount

¹¹⁸ GARF, 5446/17/341, 20–22.

¹¹⁹ RGASPI, 17/162/19, 19.

to 600 million rubles; this was 'a most crude violation of state discipline by the leadership of the bank, which disorganised the work on controlling currency circulation'. Antipov rejected Mar'yasin's reference to the '3 per cent right' of the bank; Antipov correctly explained that the 1927 decree required that all currency issued on this ground must be withdrawn again before the end of the month in which it was issued.¹²⁰

¹²⁰ GARF, 5446/26/73, 6–4; for the STO decree, see GARF, 5674/4/10, 71 (point 8). This incident is discussed further below.

CHAPTER EIGHT

1935 IN RETROSPECT

The second of the three years of rapid economic development, 1935, was the most successful of all the pre-war years. Industry and agriculture both expanded more rapidly than in 1934. The complicated abolition of food rationing was successfully negotiated, the living conditions of a substantial minority of the urban population noticeably improved and many peasants were also living better. In consequence, an accelerating euphoria about the future of the economy sounded forth with a loud voice; and in the last four months of the year the campaigns for economic efficiency gave way to Stakhanovism with its emphasis on heroic feats of labour productivity. Over-optimism about economic prospects, encouraged by Stalin and enthusiastically supported by Ordzhonikidze, led to the decisions in the second half of 1935 (discussed in Chapter 9) to increase investment in the single year 1936 by over 50 per cent. The smoother development characteristic of 1934 and most of 1935 began to be undermined.

(A) CAPITAL INVESTMENT

The initial modest investment plan for 1935 would have resulted in a decline in investment as compared with 1934, but it was augmented by many *ad hoc* decisions (see ch. 5). The enlarged plan was not completely fulfilled. According to the preliminary monthly reports, 92.1 per cent of the annual investment plan for the economy as a whole was fulfilled by the end of the year, and 94.3 per cent of the Narkomtyazhprom plan.¹ Investment measured in current prices increased by 15.3 per cent – and this figure underestimates the real increase, as costs probably declined during the year (see Tables 12(a) and 12(b) below). The material inputs into investment increased even more rapidly than investment measured in value terms. According to Western estimates, the production of building materials increased by

¹ *Osnovnye pokazateli*, January 1936, 112–15. The final results for 1935 state that Narkomtyazhprom had completed 95.2 per cent of the plan (*Tyazhelaya promyshlennost' 1935* (1936), 295).

24.8 per cent and of capital equipment by 28.8 per cent.² The number of building workers declined by 15.6 per cent, from 2,250,000 to 1,900,000.³ According to Soviet estimates, this drastic decline was compensated by a dramatic increase of labour productivity in the industry by as much as 22 per cent, which began in the spring of 1935, preceding Stakhanovism by half a year.⁴

During the first five-year plan investment had been overwhelmingly concentrated on heavy industry. It was strictly limited in other sectors of the economy, including the consumer industries, the railways, housing and agriculture.⁵ Stalin had optimistically asserted in 1930 that the time had come to switch resources to light industry, but it was not until 1934 that priorities began to change. The authorities now set themselves five competing aims: to increase consumption; to expand social and cultural services; to overcome the transport bottleneck; to cope with the insistent claims of Soviet defence – and at the same time to support heavy industry.

This proved a very difficult task. As often happens when priorities change, the shift largely took place not by drastically reducing investment in the sectors previously afforded priority, but by directing the *increase* in investment to the newly-favoured activities. In 1935 this change in direction was particularly pronounced. Four sectors, responsible for less than half of total investment, absorbed 86.5 per cent of the net increase in investment as compared with the previous year. (See Tables 14 and 8)

Investment in the consumer industries expanded less rapidly than in the other three sectors. At the builders' conference in December 1935, Lyubimov, People's Commissar of Light Industry, explained that its investment was mainly concerned with the reconstruction of existing enterprises, except in Central Asia; and with enlarging housing and canteens in the many factories transferred from local industry. Modern machinery for light industry was not yet being made by the Soviet machine-building industry – for many items of equipment not even designs had yet been produced. The building technology available was

² See Table 18; Moorsteen and Powell (1966), 878–9; and Moorsteen (1962), 454.

³ RGAE, 1562/10/468, 12.

⁴ *Narodno-khozyaistvennyi plan 1936* (1936), 285.

⁵ The earlier disasters of agriculture made it necessary to direct a substantial part of investment in machine building to the production of tractors and combine harvesters – but this modernisation was insufficient to compensate for the reduction in the number of horses.

very backward. Light industry possessed 'only one excavator, and that an old one'. The industry lacked quarries of its own, and the new factories under construction, such as the Tashkent cotton textile combine, depended on the supply of bricks from quarries attached to the railways.⁶ A long time would elapse before the Tashkent combine would be completed: announced with great ceremony in 1932, the work was not started until two years later. Thus light industry still mainly used the factories and the machinery established before the revolution and in the 1920s. The shortage of cotton, and of raw materials from animals, meant that there had been little incentive to carry out the far-reaching modernisation programme which had been fiercely debated during the preparation of the first five-year plan and was optimistically included in the second plan.⁷ In contrast, in the food industry some large modern factories had already been established (see vol. 4, p. 491). Market supplies from individual peasants had given way to compulsory deliveries from state farms, collective farms and collective farmers, and the authorities believed that large modern bakeries, meat processing combines and canning factories were essential if these centralised supplies were to be directed to the favoured sections of the urban consumers.

In the second sector, social and cultural services, investment expanded much more rapidly. Within this sector, investment in education increased most rapidly. In real terms it had substantially declined between 1930 and 1933 (see vol. 4, p. 506). It increased in 1934, but in real terms was probably not much higher than in 1930, in spite of the huge increase in the number of children attending school. In 1935, following the announcement of the school building programme (see p. 19 above), investment in education more than doubled. Investment in housing also increased rapidly, though as in previous years much of the increase was absorbed by the rapid increase in the cost of house building. The total stock of urban housing increased by only 2 per cent in 1935.⁸ Investment in the health services increased least rapidly, following an increase of 87 per cent in 1934.

In absolute terms the third sector, transport, particularly the railways, received the largest increase in investment. Investment in this sector had been relatively neglected for many years. It increased substantially in 1934 and by a further 36 per cent in 1935. The increase

⁶ *Soveshechanie* (1936), 255–9. 'My brick,' interjected Kaganovich.

⁷ For these debates, see Carr and Davies (1969), 417–18.

⁸ It rose from 196.6 million m² at the end of 1934 to 200.4 million m² at the end of 1935 (*Narodno-khozyaistvennyi plan 1936* (1936), 467).

in investment in the railways alone amounted to over one-third of the total increase in investment. In most sectors of the economy investment lagged behind the annual figure for 1935 set out in the second five-year plan, but investment in the railways exceeded the five-year plan figure by over 20 per cent.⁹

The most rapid increase took place in the fourth sector, defence. Investment in Narkomoborony increased by as much as 65 per cent. At the TsIK session in January 1936, Tukhachevsky explained in public that the expansion of the army had required 'the construction of additional barracks, the extension of training grounds and testing sites, and the allocation of additional resources to the maintenance of personnel'.¹⁰ Investment in the NKVD increased by 44.2 per cent, from 1,284 to 1,852 million rubles.¹¹ Defence thus already accounted for a larger share of investment than the food and light industries combined.

The expansion of these four sectors meant that investment elsewhere was greatly restricted. Investment in heavy industry increased by only 10 per cent, and in important branches of heavy industry the increase was even less. These included iron and steel and many branches of engineering, which had received ample investments in earlier years. Investment in the chemical industries was reduced. The increases in heavy industry were concentrated in non-ferrous metals, where large new facilities were still being established, and in the lagging oil industry. Investment in the electricity industry also increased, though it lagged behind the figure stipulated in the five-year plan.

(B) INDUSTRIAL PRODUCTION

On December 20, 1935, the usually undemonstrative Mezhlauk sent a memorandum as head of Gosplan to Stalin and Molotov pointing out that as a result of the 'stormily developing Stakhanov movement' heavy industry would exceed its plan for the year by 5.3 per cent. He therefore proposed that the increase in the 1936 plan should not be based on the previous estimate of production by Union and local

⁹ This figure is in terms of current prices; in terms of '1933 planning prices' railway investment also lagged behind the five-year plan.

¹⁰ *EZh*, January 14, 1936.

¹¹ *RGAE*, 1562/10/582^a, 6. For investment in the armaments industries, see p. 203 below.

industry in 1935 as a whole (45,170 million rubles) but on the new estimate (49,490 million rubles).¹²

In the event Mezhlauk proved to have been slightly too optimistic: production in 1935 was reported to have been 49,235 million rubles.¹³ But industrial growth in 1935 was more rapid than in 1934 and exceeded the expectations of the authorities. According to official figures, it increased by 28.6 per cent as compared with the planned 19.4 per cent. The overfulfilment of the plan of each of the four main industrial commissariats, as well as of the commissariats of local industry, was unprecedented.¹⁴ The émigré research group in Prague, previously very sceptical about/ Soviet progress, concluded that the plan was fulfilled 'more calmly and more evenly, both over time and between industries'.¹⁵

Most of the capital goods industries subordinate to Narkomtya zhprom achieved major advances.

The outstanding achievement was the rapid progress of the metals industries. Iron and steel production increased by 29.4 per cent, exceeding the annual plan for the first time since the 1920s. Rolled metal output increased by 33 per cent, more rapidly than pig iron (27 per cent), thus closing the gap which Stalin had singled out the previous December (see p. 75 above). The more complex products – electrosteel, steel pipes and high-quality steels generally – increased particularly rapidly. Some new plant was brought into operation in 1935 (see n. 16 below), but Gosplan correctly emphasised that, as in 1934, the production increases were achieved 'not so much by the growth of production capacity as by the further improvement of all technical and production indicators'.¹⁶ The production of iron ore, a bottleneck in previous years, increased by 25 per cent, and both ore

¹² RGAE, 4372/92/39, 20–21.

¹³ *Osnovnye pokazateli*, 1935, 4; the report was completed on January 20, 1936.

¹⁴ *Narodno-khozyaistvennyi plan 1936* (1936), *Osnovnye pokazateli*, 1935.

¹⁵ BP, cxxvi (January–February 1936), 2–4.

¹⁶ This is shown by the following data for 1935 (million tons):

	Capacity increase ¹	Production increase ²
Pig iron	0.8	2.1
Crude steel	2.0	2.9
Rolled steel	1.0	2.2

Sources: ¹ *Narodno-khozyaistvennyi plan 1936* (1936), 112.

² *Narodno-khozyaistvennyi plan 1936* (1936), 39.

and coke were used more economically.¹⁷ Gosplan even-handedly attributed the success of the iron and steel industry both to 'the achievements of the Stakhanov movement' and to the profitability campaign. According to Gosplan, this campaign had introduced 'genuine khozraschet', establishing a new payment system both for engineering personnel and for workers, and had led to both technological and economic improvement – 'economics began to push technology forward'.¹⁸

The non-ferrous metals industries also increased rapidly. The smelting of copper increased from 53,310 tons in 1934 to 75,423 tons in 1935, mainly at the three Urals factories. But demand expanded more rapidly than production (see p. 234 below), Production of aluminium at the new Dnepr works, the heart of the Dnepr combine, increased from 14,400 tons in 1934, its first year of operation, to 25,000 tons in 1935. Aluminium production now exceeded total consumption in the previous peak year 1931, when it amounted to 20,000 tons, entirely imported. Gosplan described 1935 as a 'breakthrough year' in the case of nickel and tin. Nickel, like aluminium, was produced for the first time in 1934, and in 1935 production increased by 22 per cent. The USSR also embarked on the production of the rare metals wolfram and molybdenum. Gosplan acknowledged, however, 'serious faults' in the production of nickel, tin and rare metals. Insufficient ore had been mined, so the refining plant could not work at full capacity, and production failed to meet the requirements of industry. The completion of the second stage of the nickel plant at Ufaei was behind schedule.¹⁹ The growing demand for these metals, which were particularly needed for armaments, led the authorities to accelerate their development (see p. 212 below for nickel project).

The greater availability of iron and steel provided the basis for the rapid expansion of the machine-building and metalworking industries, the production of which was nearly 10 per cent greater than planned. During the year new capacity was established for manufacturing iron-and-steel making equipment in the Kramatorsk plant and in Uralmashzavod. In the automobile industry, new capacity was completed to enable an increase in the production of lorries by 50,000 a year. The capacity of the nine main machine-tool factories

¹⁷ *Narodno-khozyaistvennyi plan 1936* (1936), 109–10.

¹⁸ *Narodno-khozyaistvennyi plan 1936* (1936), 111.

¹⁹ *Narodno-khozyaistvennyi plan 1936* (1936), 121–2.

was increased by one-third during the year, and the Khar'kov factory for radial drills and polishing machines began operation. In transport engineering, the annual capacity of the Lugansk locomotive works was increased from 400 to 600, and the factory produced 521 'FD' locomotives as compared with only 182 in 1934.²⁰ The total production of goods locomotives amounted to 1,807 as compared with the planned 1,707, an increase of 54.8 per cent above 1934 (measured in terms of series 'E' locomotives).²¹ But the production of excavators for the neglected building industry lagged behind the plan in the first six months of 1935. In October, the Commission for Soviet Control reported unfavourably on the industry to Sovnarkom; and subsequently total production increased from 290 in 1934 to 458 in 1935.

The increase in locomotive production was part of the successful effort to greatly enlarge the supply of rolling stock to the railways. The ability of the Soviet planning system to switch resources to a priority sector was memorably demonstrated by the unprecedented expansion in the production of goods wagons for Narkomput' from 19,024 in 1934 to 61,658 in 1935.²² This remarkable increase was achieved primarily by switching engineering factories which had previously produced other types of machinery. Over 50 per cent of all goods wagons produced in 1935, and 71 per cent of the increase over 1934, were manufactured at 12 factories at which no or few wagons had previously been produced. These included such famous works as 'Serp i Molot', Rostselmash, Krasnoe Sormovo and the Kirov works in Leningrad. Most of the new wagons were technically relatively simple 2-axle flat cars. The production of passenger wagons was simultaneously reduced from 1,490 to 889.²³

The production of lorries, tractors and combine harvesters all greatly increased. Both ZiS and ZiM increased their production of lorries by about 40 per cent, but the production of motor cars, produced solely at ZiM, increased by only 12 per cent.²⁴ The production of tractors reached its pre-war maximum. The main increase was in

²⁰ *Narodno-khoziaistvennyi plan 1936* (1936), 66–7, *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 50–1.

²¹ *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 50–1.

²² Measured in 2-axle units, the increase was from 28,957 to 85,675 (see Rees (1995), 232).

²³ For details see *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 51–2.

²⁴ *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 49.

the production of caterpillar tractors – the Chelyabinsk factory reached almost full capacity. On May 21, Sovnarkom finally decided that the Khar'kov and Stalingrad factories should go over to the production of caterpillar tractors.²⁵ During the year the complicated transfer began, and production of wheeled tractors increased only slightly. The May 21 decree also ordered an increase in the initial plan for the production of the Chelyabinsk factory in 1935, and this was almost achieved.²⁶ The factory was due to replace petrol by diesel engines during 1935–37, at an investment cost of 100 million rubles, three million in foreign currency. The production of intertilling tractors, so far neglected, increased from 2,680 to 12,424; they were all manufactured at the Kirov works in Leningrad.²⁷ The three factories responsible for producing combine harvesters more than doubled their output, though the revised plan was not achieved.²⁸

Two branches of machine building were notably less successful. Machine-tool production increased by 24 per cent, but failed to reach the plan. The new Khar'kov factory lagged particularly badly, and production of the more advanced automatic and semi-automatics amounted to a mere 258 as compared with the total machine-tool production of 10,321.²⁹ According to Gosplan, the planned production of major items of equipment for the electricity industry was also underfulfilled 'on a considerable scale'.³⁰

The fuel and power industries were far less successful than the metallurgy and engineering industries. The Stakhanovite movement achieved its greatest success – albeit temporarily – in coal mining. Coal production rose fairly slowly in the first nine months, but extremely rapidly in October–December.³¹ The industry nevertheless failed to reach its plan.

²⁵ GARF, 5446/1/481, 78–80 (art. 956/149s).

²⁶ The plan for the Chelyabinsk works was increased from 15,000 to 21,000 tractors; 20,450 were produced.

²⁷ For the figures on tractor production in this paragraph, see *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 49–50. The 1935 report on GUTAP is located in RGAE, 7622/1/785.

²⁸ *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 84. The original plan of 20,000 harvesters was increased to 25,000 on May 27; 20,170 were produced.

²⁹ *Tyazhelaya promyshlennost' ... (natural'nye pokazateli)*, 1935, 55; these figures are for Glavstankoinstrument only, excluding production in the armaments and other industries.

³⁰ *Narodno-khozyaistvennyi plan 1936* (1936), 65.

³¹ Output per month (thousand tons): January: 8,215; September: 8,587; December: 11,175 (*Osnovnye pokazateli*, 1935, p. xxi).

The oil industry, neglected in the early 1930s after its great success during NEP, also failed to reach the plan. In spite of increased investment in 1935, and the increase in drilling by 18.5 per cent, Gosplan reported 'considerable tension' due to oil shortages:

At the end of 1935 the oil industry was still in a clearly unsatisfactory state, and it is still one of the backward industries.³²

Following a visit to the USA, a Soviet oil specialist, in a memorandum to Molotov, Chubar' and Ordzhonikidze, concluded that 'we are a long way behind the technical development of the US industry'. He listed indicators demonstrating this backwardness, described processes which were not yet used at all in the Soviet Union, and proposed that the USSR should seek substantial US technical assistance.³³

The electricity industry was the most successful of the fuel and power group. Production increased by 23 per cent. As in many other industries, the increase was achieved primarily by the more efficient use of capacity – the average annual number of hours for which power stations operated rose from 3,980 to 4,700. This was achieved partly by increasing the steam productivity of the boilers and partly by reducing hold-ups and speeding up repairs. Gosplan commented that 'contrary to the assertions of some engineering and technical staff, whose attitudes are conservative', the loss of power in the transmission lines and the number of breakdowns also declined substantially. In spite of the increase in production, however, power was still in short supply in the Donbass, and power shortages led to delays in industrial production in the Urals. The auguries were not favourable. New capacity increased by only 967,000 kW as compared with the planned 1,538,000. Gosplan warned that while some slack still remained, 'it will not cover growing needs in full'.³⁴

The expansion of the timber industry was one of the most remarkable developments in 1935. After increasing rapidly in the late 1920s, the production of timber stagnated in the early 1930s, primarily

³² *Narodno-khozyaistvennyi plan 1936* (1936), 101, 103.

³³ GARE, 5446/26/58, 141–137 (dated January 19, 1936). In reply Rukhimovich, in charge of the fuel industry, claimed that the author (Boev) had underestimated the Soviet indicators, but also proposed the purchase of US equipment (*ibid.* 144–142ob, dated January 29).

³⁴ *Narodno-khozyaistvennyi plan 1936* (1936), 78–81.

owing to the decline in the availability of men and horses. The amount of commercial timber shipped was less in 1934 than in 1931. A decree of TsIK and Sovnarkom, dated January 19, 1935, placed first in its list of the defects of the industry 'the completely unsatisfactory organisation by Narkomles and its agencies of the recruitment of the labour force and its consolidation in production, and a formal attitude to the signing of contracts for timber haulage with kolkhozy and industry'.³⁵ In 1935 the labour available continued to decline.³⁶ But the mechanised shipment of timber, though remaining a small part of the total, greatly increased, and increased labour productivity was encouraged by a substantial rise in wages. The total amount of commercial timber shipped increased from 99.7 to 117.0 m³, as a result of an increase in output per worker of 24 per cent.³⁷ This was hailed as a major breakthrough, and People's Commissar Lobov was awarded the Order of Lenin.³⁸

The industrial successes of 1935 were not confined to the capital goods' industries. For the first time for many years, the output of the consumer goods' industries, 17.4 per cent greater than in 1934, exceeded the plan.³⁹ This progress was primarily due to the greater supply of raw materials from agriculture. Food industry production increased by as much as 22.3 per cent. The reasonable harvest of 1934 and the good harvest of 1935 enabled flour output to rise by 36.9 per cent, and, as a result of the substantial sugar-beet harvest, sugar production increased at a similar rate. The greater availability of livestock in the second half of the year provided the basis for a

³⁵ GARF, 5446/1/95, 284–293 (art. 123).

³⁶ According to a Narkomles report, the number of workers engaged in timber procurement declined from 568,000 in 1934 to 554,000 in 1935. The number of seasonal workers within this total declined from 469,000 to 449,000, so the number of permanent workers slightly increased (RGAE, 7637/1/1890, 93–94).

³⁷ RGAE, 7637/1/1889, 94, *Narodno-khozyaistvennyi plan 1936* (1936), 150–1. Mechanised shipment increased from 5 to 11 million m³. Most timber was procured by Narkomles, the remainder by various commissariats and the rural population. According to preliminary figures, commercial timber shipped by Narkomles amounted to 71.9 million m³, as compared with 60.3 million in 1934. The other organisations involved were Narkomtyazhprom (10.0 million m³), Narkomput' (10.1), the timber cooperatives (4.2), Narkomzem (4.0) and 'self-procurement' by the rural population (13.7); production by Narkomvnudel was not listed in these published figures (*Narodno-khozyaistvennyi plan 1936* (1936), 424–5).

³⁸ See Rees, ed. (1997), 136 (Rees).

³⁹ The data on these industries, except where otherwise stated, is obtained from *Osnovnye pokazateli*, 1934, 14–17, and *Osnovnye pokazateli*, 1935, 4, 10–11, 24–5.

significant increase in meat and dairy production. The growth of the food industry was also due to the development of food processing. In 1935 803 million cans and jars of preserved food were produced, as compared with 683 million in the previous year. Mikoyan asserted that canning factories were 'all or almost all equipped with the last word in United States' technology', and were capable of producing 'up to 1,200 million cans or more'. The increase in fish production by 12.1 per cent was relatively disappointing after the rapid expansion in the previous year. Mikoyan pointed out that the fishing industry was equipped with trawlers, 'floating crab factories' and whale boats, and claimed that it was capable of producing much more. Other branches of the food industry, however, were largely not modernised: in spite of the construction of a number of modern bakeries, much bread baking relied on primitive equipment.⁴⁰

So-called light industry, producing industrial consumer goods, grew by only 11.4 per cent. This was largely because the output of cotton textiles, by far the largest component, was inhibited by the poor cotton harvest in the previous year, and increased by only 1.8 per cent. Leather and woollen goods performed better, as a result of a moderate increase in raw materials from livestock.

(C) ARMAMENTS PRODUCTION

In contrast to the outstanding successes of civilian industry, the armaments industries lagged far behind the plan. Investment in armaments increased much more slowly (by 18.9 per cent) than investment in the defence facilities controlled by Narkomoborony, and was probably still somewhat lower in real terms than in the peak year 1932. While investment costs generally somewhat declined in 1935, they increased in the armaments' industries.⁴¹

In the course of 1935, the military, alarmed by the deteriorating international situation, pressed for large increases in the plan for armaments' orders. Initially the agreed figure was 2,662 million rubles, which was already 37 per cent higher than in 1934. As a result of a series of *ad hoc* decisions, this increased to the enormous

⁴⁰ P, December 27, 1935.

⁴¹ In Glavvoenprom investment costs were planned to decline by 14 per cent, but in fact increased by over 7 per cent, as a result of the increase in building costs by 10 per cent (GARF, 7297/41/194, 216–215, dated June 1936).

figure of 3,450 million rubles, 77 per cent greater than in 1934.⁴² In the upshot, however, the orders fulfilled amounted to only 2,226 million rubles, less than the original plan. This figure, in current prices, is 14.3 per cent greater than the 1934 figure, but during 1935 prices of military goods may have increased owing to the rise in nominal wages and in the cost of inputs as a result of the abolition of food rationing. As in the previous year, the increase in the total production of the armaments industries was mainly due to the expansion of their civilian production.⁴³

The slow development of the armaments industry sharply contrasted with the growth of Germany's aggressive intentions, emphasised by Tukhachevsky in his March 31 article (see p. 91 above). As the failure to fulfil the armaments plan became clear, the military, and the defence sector of Gosplan, bombarded the senior figures in the Politburo with anguished complaints. Tukhachevsky, the most vociferous and persistent, sent a detailed memorandum to Molotov in August complaining that the armaments plan was not being fulfilled.⁴⁴ In October a memorandum from the central administration of Gosplan to Molotov and Mezhlauk reported that in January–September only 47 per cent of the armaments plan had been fulfilled as compared with 61 per cent in the same period of the previous year; in contrast the industry had achieved 71 per cent of its annual plan for peaceful production. The report commented that this was 'extremely abnormal'.⁴⁵ On November 15, in a memorandum to Stalin, Tukhachevsky declared that preparations for production in the event of war were wholly inadequate: the situation was 'extremely threatening'; 'in the event of war the army will undoubtedly suffer very severe shocks'.⁴⁶

Public references to the armaments industry were subject to strict censorship. Virtually nothing about these setbacks appeared in the press, which presented the progress of defence in a rosy light. But the

⁴² RGVA, 2/14/1667, 20 (dated January 20, 1936).

⁴³ See Harrison and Davies (1997), Table 8. In Glavvoenprom (excluding the aircraft and tanks industries) total production measured in 1926/27 prices, increased by 17.8 per cent. 'Peaceful production' rose by 28.4 per cent, but military production by only 10 per cent (RGAE, 7297/41/194, 296 – n.d. [1936]).

⁴⁴ RGVA, 33989/2/220, 64–61 (dated August 28).

⁴⁵ RGVA, 33989/2/220, 290–288 (report dated October 22, signed by Kraval'; a copy was sent to Tukhachevsky). These figures did not include either the military or the civilian production of the aircraft industry.

⁴⁶ RGVA, 33989/3/400, 258–261; for other aspects of this memorandum see p. 210 below.

press was also careful to explain to the public that armaments in the capitalist countries were advancing rapidly, so that great Soviet efforts must be made if the potential enemies were to be surpassed. Following his visit to the United States, Tupolev emphasised that in the United States and Britain monoplanes were replacing biplanes, and that 'in America construction in wood is being used less and less'.⁴⁷ On the annual Aviation Day, celebrated for the third time on August 18, the press pointed out that expenditure was rising rapidly in capitalist countries, particularly in Germany, where (it was alleged) there were already 10,000 aircraft (including civil aircraft), the number of which would double by the end of 1936.⁴⁸ On the same occasion Koroley, head of Glavaviaprom, told the Soviet public that capitalist aviation was making 'huge efforts' to create new designs of aircraft and engines, and warned that 'the data we obtain from the literature about the technical development of capitalist aviation is to a considerable extent out of date'. To overtake the fascist countries the aircraft designer must occupy centre stage and the industry must undergo 'systematic modernisation'.⁴⁹

The priority and urgency of expanding and modernising the aircraft industry were emphasised by the 1935–37 plan for the industry proposed by a commission headed by Molotov and approved by the Politburo in April.⁵⁰ The initial 1935 plan for the aircraft industry envisaged a fairly modest increase in output from 440 to 531 million rubles, but during 1935 this figure was increased to 611 million rubles.⁵¹ Major changes in the pattern of production and in technology were envisaged for 1935. The total number of military aircraft produced was planned to decline from 3,962 to 2,891. This was because the production of reconnaissance planes and trainers was to be drastically reduced, while the production of the much more expensive bombers and fighters would increase by 57 and 67 per cent respectively.⁵² This involved substantial changes in technology.

⁴⁷ ZI, July 6, 1935; for other aspects of his visit, see p. 234 below.

⁴⁸ ZI, August 18, 1935.

⁴⁹ ZI, August 18, 1935.

⁵⁰ RGASPI, 17/162/18, 7–13 (art. 172, dated April 22). This decree transferred 200 million rubles to capital investment in 1935 from the reserve (see p. 134 above).

⁵¹ For sources see previous n.

⁵² For 1934 output, see *Samoletostroenie*, i, 432–5; we have omitted 'passenger and other aircraft'. 1935 figures are calculated from the figures in GARF, 8418/10/31, 93–94 (this decree was dated November 10, 1935 and therefore included changes introduced during 1935).

The main bomber would be the high-speed SB2, designed by Tupolev, the main fighter the T-16, a pioneer monoplane with a retractable undercarriage, only 50 of which had been produced in 1934. The bombers were to be produced at f. 22 in Moscow (formerly the Russo-Baltic factory), the fighters at the new f. 21 in Gor'kii. The 1935 order for the SB2 was increased from 200 to 400 in April. In the hope of achieving this very optimistic plan, f. 22, f. 26, which manufactured its M-100 engine, and f. 95, which produced non-ferrous metals, were all transferred to 'mobilisation conditions'.⁵³ A further complication was that the I-15 needed longer runways, but the decision to enlarge the runways was not taken until July 1935.⁵⁴

The aircraft industry was in difficulties throughout the year. Following a report from Narkomtyazhprom on the results of the first six months of 1935, a STO decree ordered that 'in view of the extremely burdensome programme of output', production not related to the industry should gradually be transferred to other branches of the economy.⁵⁵ Then in the autumn a subcommission of the Commission of Party Control reported very unfavourably on the performance of the industry. The report was prepared by Khakhan'yan, in charge of military supervision, and Berezin, head of the naval group, and sent to Stalin and Molotov.⁵⁶ It concluded that, except in the case of fighters, 'the rearmament plan for the current year is clearly disrupted'. The production of bombers lagged badly; contrary to the situation in the previous year, airframes now lagged behind engines. The report claimed that recent air disasters were caused by production defects not bad operation. The plan for the new SB2 for 1935 was reduced to from 400 to 75, but in fact none were produced by the end of the year.

Soon the fighter programme also came in for strong criticism. In a separate memorandum, Berezin concluded that the I-15 was 'completely unsuitable for warfare' and 'dangerous to operate', and even the new I-16 had serious defects, including an unreliable chassis. Polikarpov, the veteran designer, had created these planes 'in an atmosphere of excessive haste, and tries not to recognise their faults',

⁵³ GARF, 8418/28/6. 68–69, dated April 5; f. 95, a new factory, had been transferred to the aircraft industry from Glavsvetmet in 1934 (*Samoletostroenie*, i, 427).

⁵⁴ *Samoletostroenie*, i, 157–8.

⁵⁵ GARF, 8418/10/38, 1–3 (decree no. 5-80ss, dated July 4).

⁵⁶ There are two versions in the archives; the second is dated October 5 (RGVA, 33989/2/220, 241–230; GARF, 8418/10/91, 13–24).

and Chkalov, who had carried out the factory tests of the planes, had concealed their defects.⁵⁷

The Khakhan'yan-Berezin report was followed by a defensive memorandum from Korolev, the head of the industry, who pointed out that there had been a lag in fighter design brought about by the general scepticism in the world aircraft industry about the military value of the fighter plane. He insisted that the I-15 and I-16 were 'a huge step forward', and had reached world levels. While acknowledging various faults in the industry, he claimed that in 1934 and 1935 it had created 13 new types of aircraft in spite of 'huge technical difficulties and the lack of a firm line from the air force'.⁵⁸ However, on behalf of the armed forces, Voroshilov reported to Molotov and Stalin on November 11 that none of the three new aircraft in the 1935 plan had been produced at all.⁵⁹ On the same day the Defence Commission established a subcommission on 'improvement of the quality of aircraft and engines and measures to complete the fulfilment of the 1935 programme'; the subcommission was headed by Ordzhonikidze.⁶⁰

On December 2, the subcommission recommended to the Defence Commission, with the support of Stalin, that Korolev should be replaced by M. M. Kaganovich (Lazar Kaganovich's brother), that Tupolev should be appointed chief engineer of the industry, and that the director of f. 22 should be replaced.⁶¹ The subcommission also secured additional subsidies amounting to 55 million rubles to cover unforeseen losses.⁶²

Summing up the performance of the aircraft industry in 1935, a STO decree reported that only 2,448 aircraft had been produced as compared with the 3,995 scheduled in the final plan. Engine production, 7,574 as compared with the planned 9,165, had more nearly achieved the plan, but only 120 of the more advanced M-100 engines had been produced as compared with the planned 1,000.⁶³ Figures issued by Narkomoborony showed that in value terms production was only 427 million rubles as compared with the planned 611 million;

⁵⁷ GARF, 8418/10/31, 131 (n.d. [November? 1935]). For Polikarpov, see vol. 3, p. 252.

⁵⁸ GARF, 8418/10/31, 39–57, dated October 28 (addressed to Stalin, Kaganovich, Voroshilov, Ordzhonikidze and Mezhlauk).

⁵⁹ GARF, 8418/10/31, 59–65.

⁶⁰ GARF, 8418/10/31, 10.

⁶¹ GARF, 8418/10/31, 7–9.

⁶² RGASPI, 17/162/19, 8, 21, dated December 9 and 28.

⁶³ GARF, 8418/28/8, 12–20 (dated January 8, 1936).

this was even slightly less than in the previous year.⁶⁴ Nevertheless, the STO decree claimed that 'in view of the capacity, technology and preparedness of the aircraft industry, the USSR is already at the present time capable of becoming the best in the world'.

In contrast to the aviation industry, the tank industry, producing the second major twentieth-century weapon, was relatively successful, as the following table shows:

Number of tanks ordered and actually supplied, 1934–35 (units)

	<i>1934 order</i>	<i>1934 supplied</i>	<i>1935 order</i>	<i>1935 supplied</i>
BT	1100	1105	650	500
T-26	1380	1426	1200	1200
T-37	950	851	1100	1104
T-28	50	50	30	32
T-35	-	-	10	7

Sources: 1934: RGAE, 4372/91/2110, 11 (dated January 11, 1935).

1935: RGAE, 4372/91/2512, 72 (dated January 10, 1936).

These reports were prepared by the army, and are therefore likely not to exaggerate the achievement of industry.

Actual orders for tanks in 1935 amounted to 448 million rubles as compared with the initial plan of 348 million and the revised plan of 475 million rubles.⁶⁵ The industry mainly continued to produce existing models.⁶⁶ The principal lag was in the production of BTs, due to the struggle, so far unsuccessful, to adapt BT-7 so that it could be equipped with a more advanced gun.

The more traditional armaments industry, producing small arms, artillery and ammunition, was supported by a number of large factories, established before the revolution and during the first world war. But it was faced with considerable difficulties in 1935 owing to the decision to

⁶⁴ Harrison and Davies (1997), 387.

⁶⁵ For the initial plan, see GARF, 8418/28/5, 214–216, dated December 20, 1934 (these figures are in 1934 prices); for the revised plan and the results, see Harrison and Davies (1997), Table 12.

⁶⁶ A decree of the Defence Commission stated that 10 experimental models had been manufactured and a further five were to be produced. To this end it transferred NATI from GUTAP to be the direct responsibility of Narkomtyazhprom, and attached the Kirov experimental factory to NATI (GARF, 8418/28/6, 230–232, dated June 19, 1935).

combine rapid expansion with a revolutionary modernisation of the armaments industry. After largely unsuccessful efforts to improve the production process in the previous two years, at the beginning of 1935 Voroshilov and Ordzhonikidze agreed that in the course of 1935 'the backward, semi-artisan method of work' would be replaced by 'the contemporary method of mass production'. A firm programme was approved for the transfer of the 67 main armaments factories in the course of 1935 to new sets of drawings (Type 'B' specifications). This would facilitate the compatibility of parts between different weapons and factories and the wider use of state standards; and it would reduce the dependence of the industries on highly skilled and experienced workers.⁶⁷ This vast programme soon got into trouble. By September 5 only 29 out of 139 items in the artillery and ammunitions industries had been transferred to Type 'B' specifications, and these not completely.⁶⁸ The industry urgently demanded that the transfer should be delayed; otherwise factories would have to temporarily cease production.⁶⁹ The military objected. On behalf of Narkomoborony, Gamarnik triumphantly sent Molotov a copy of a telegram he had acquired in which the head of the armaments industry illegitimately instructed a factory director to violate the planned transfer to Type 'B' specifications:

The main programme must be fulfilled... If you don't prepare Type 'B', use drawings of current production.⁷⁰

Failures in the ammunition industry gave rise to particularly bitter complaints from the military. Production of the simplest item, rifle cartridges, more than trebled, and exceeded the plan adopted at the end of 1934,⁷¹ but production of bombs drastically declined and production of shells increased by only 4.9 per cent. In September, in

⁶⁷ This programme is discussed in RGVA, 4/14/1298, 140–144 (report from Efimov, deputy head of armament of the Red Army, to Voroshilov, dated September 9, 1935), 4/14/1315, 198–208 (report from Pavlunovskii to Voroshilov, November 4, 1935).

⁶⁸ RGVA, 4/14/1298, 142 (memorandum by Efimov to Voroshilov, September 9, 1935).

⁶⁹ RGVA, 4/14/1298, 147 (M. Kaganovich, deputy people's commissar for heavy industry, to Molotov, September 9, 1935).

⁷⁰ RGVA, 4/14/1298, 149 (Pavlunovskii to Premudrov in Molotovo, August 12–13, 1935); for Gamarnik's letters of October 1935 see *ibid.* 148, 150.

⁷¹ For the output figures, see Harrison and Davies (1997), Table A2; for the plan, see GARF, 8418/28/5, 213–215 (dated December 20, 1934). 1934: 191,000; 1935 plan 600,000; 1935 actual 612,000.

a memorandum to Molotov, Tukhachevsky reported that shells were of poor quality and that a high proportion had to be rejected, and supported a report from the NKVD which cited informers who alleged that the factories concerned were engaged in 'direct deception'.⁷² Then in his November 15 memorandum to Stalin he complained that only one-sixth of the shell programme had been fulfilled by the end of October, and that the production of explosives similarly lagged, and criticised the defence commissar for failing to discuss the problem.⁷³ On the following day he addressed two memoranda to Molotov, complaining that the production of both shells and rifle bullets was far less than planned, and that the production of artillery pieces had been concentrated largely on small-calibre guns, and demanding that the question should be discussed at a government meeting.⁷⁴

The shell crisis was partly due to the shortage of explosives, for which the chemical industry was responsible. On December 3, Rataichak, head of Glavkhimprom, wrote an apologetic letter to Stalin and Ordzhonikidze, immediately after Ordzhonikidze had threatened that he and the other culprits would be expelled from the party. Rataichak admitted that 'having fulfilled the programme for chemistry as a whole this year, we have failed with the programme of the Military Chemical Trust as far as the provision of explosives for shells is concerned'. The revised plan for the year was 5,900,000 shells, but by the end of November only 2,100,000 shells had been completed. The work of Glavkhimprom and the trust had been bad, but Narkomoborony had imposed tighter specifications for shells, and this had led to a high percentage of spoiled production; because 'we were unable to set up the technological process quickly'. He requested that the imposition of the new technical conditions should be delayed for two months. According to Rataichak, another problem had been that the machine-building factories had supplied only 2,250,000 shell cases by November 16, and the stock in hand had been only 1,100,000 cases at the beginning of the year. Rataichak admitted that he had wrongly concentrated his attention on nitrogen, mineral fertilisers, poisons and factories under construction, and left the military industry to his deputy Syrtsov. He promised to spend

⁷² RGVA, 33989/2/220, 122–119 (dated September 2); the NKVD report, written by deputy commissar Prokof'ev, was dated August 9.

⁷³ For this memorandum see p. 204 above.

⁷⁴ RGVA, 33989/2/220, 229–227, 225–222.

his entire time on the military industry in future, that 3,200,000–3,300,000 shells would be produced in 1935, and that the programme for the production of aircraft bombs would be carried out in full.⁷⁵

This revised programme failed. Only 1,578,000 shells were produced in 1935, and only 154,000 bombs of all kinds as compared with the programme of 254,000 for aircraft bombs. While the production of small-calibre guns increased, the production of medium and large-calibre guns declined drastically.

By the end of 1935 the USSR was only a short distance along the road to the enormous investment and production effort required to modernise and expand the armaments industry in face of the growing power of Japan and Germany. At the session of TsIK in January 1936, Tukhachevsky came as close as possible to a public statement to this effect, asserting that ‘our military expenditure is a considerably smaller proportion of the budget than in most states’, and that ‘from the point of view of the task of the practical organisation of our defence effort this figure is really – modest and a minimum’.⁷⁶

(D) THE ROLE OF THE GULAG

At the beginning of 1935 L. I. Berenson, head of the financial department of the NKVD, sent a memorandum to Yagoda pointing out that surplus labour was available in many Gulag camps, for example: 10,000 in the Central Asian camp; about 3,000 in the Karaganda camp; 2,000 in both the Svir’ and the Temnikov camps.

According to Berenson, the camps had tried to deal with the resulting financial difficulties by sending surplus workers to contract work, but this had not solved the problem. The Central Asian camp had sent 12,000 prisoners to 12 different agencies, including a timber combine and a sovkhoz, but a considerable number of these agencies were short of money, their payment for the work was greatly delayed and in consequence the Gulag remained in a difficult financial position. Berenson argued that the excessive supply of labour might increase, and thus worsen the financial situation, and accordingly proposed that labour should be supplied to agencies only in small units of less

⁷⁵ RGASPI, new acquisitions.

⁷⁶ EZh, January 16, 1936.

than 1,000 prisoners and that Narkomput' or Narkomtyazhprom should be requested to offer a large project to the NKVD to absorb excessive labour. Yagoda read Berenson's memorandum, and instructed Berman, the head of the Gulag system, to prepare data on the available amount of labour and labour surpluses.⁷⁷

In practice, perhaps partly as a result of the availability of labour, in the course of 1935 the NKVD took over a large number of new projects:

January: the construction of a 180 km railway from Khabarovsk to Komsomol'sk.⁷⁸

June: on June 20, following the deliberations of a commission headed by Ordzhonikidze, the Politburo ordered the construction of a 10,000-ton nickel plant at Noril'sk as 'shock project' to be completed by a special camp in 1938, and transferred the responsibility for it from the Northern Sea Route to Gulag.⁷⁹

July 10: the decree of Sovnarkom and the central committee on the reconstruction of Moscow (see p. 108 above) included the construction by the NKVD of a water station to transfer water from the Volga to Moscow as a result of the completion of the Moscow–Volga canal in 1937: it should provide 25 million *vedra* (buckets) (300 million litres) in 1937 and 50 million *vedra* (600 million litres) in 1938.⁸⁰

July 29: construction by the NKVD of a cellulose factory in the Segezhs'k combine for timber, paper and chemicals.⁸¹

September 14: the Politburo approved a decree in the name of Sovnarkom and the central committee that hydro-units should be constructed by prisoners near Uglich and Rybinsk. This would enable the Moscow–Volga canal to be approached by land from the Volga, and ensure a depth of 2.3 metres in the Volga from Rybinsk to Astrakhan (the present depth was 1.4–2.35 metres). The facility

⁷⁷ TsAFSB, 3/2/454, 5–6.

⁷⁸ GARF, 5446/1^b/480, 31 (Sovnarkom decree, dated January 23).

⁷⁹ RGASPI, 17/162/18, 20 (dated April 20), 17/162/18, 62, 66–67 (dated June 20); GARF, 5446/1/481 (dated June 23); GARF, 5446/1^b/480, 194. The Ordzhonikidze commission included Yagoda and Berman. This was the first step in the transfer of authority from the Northern Sea Route to NKVD.

⁸⁰ RGASPI, 17/3/968, 52.

⁸¹ GARF, 5446/1^b/482, 87 (Sovnarkom decree).

was to be completed by 1939 and managed by Ya. D. Rapoport (at present in charge of the BBK).⁸²

October. Molotov and Kaganovich received a ciphered telegram from Stalin and Voroshilov on October 22 proposing that the previously independent Tsudotrans should be transferred to the NKVD. The Politburo approved this proposal on the following day.⁸³

A month later, on November 25, Yagoda and the new head of Tsudotrans, in a memorandum to Stalin, strongly argued that the old organisation had wrongly concentrated on the construction of local roads rather than the major roads which were needed for defence and other purposes.⁸⁴

During the course of 1935 the NKVD also took charge of the extensive programme for the construction of grain warehouses.

However, the NKVD recognised that it was not capable of managing projects which required a range of technical skills. On October 8, Kosior and the secretary of the Far Eastern region proposed that it should take over the construction of the iron and steel works in Komsomol'sk, arguing that it could use the labour which would be released from other NKVD projects in the region. But on October 9 Yagoda informed Molotov that the NKVD did not have the expertise to prepare the project, which would have to be undertaken by Narkomtyazhprom; and that the NKVD would need to be provided with both the necessary experts and the capital equipment to carry out the construction; Yagoda also claimed that it would need to remove labour from other important Far-Eastern projects in order to build the factory. Consequently Sovnarkom accepted a Narkomtyazhprom proposal that the project should be postponed.⁸⁵

An important development in 1935 was the adoption by the NKVD of an elaborate series of orders providing for the remission of sentences in return for good work, and for the introduction of piece work for technically-qualified prisoners.⁸⁶ On December 20, in tune with the times, the NKVD adopted a further order 'On applying improved

⁸² RGASPI, 17/3/971, 37, 39.

⁸³ RGASPI, 17/163/1084, 163. For further details see p. 100 above.

⁸⁴ *Istoriya Stalinskogo Gulaga*, iii (2004), 136–44.

⁸⁵ See *Istoriya Stalinskogo Gulaga*, iii (2004), 135–6, 535.

⁸⁶ See *Istoriya Stalinskogo Gulaga*, iii (2004), 126–32 (order of January 31), 132–3 (order of September 8).

norms for the remission of working days for prisoners of corrective labour camps and colonies who work in a Stakhanovite fashion.⁸⁷

During 1935, the manpower at the disposal of the NKVD increased substantially: the number of prisoners increased by 15.7 per cent in camps and as much as 90.4 per cent in labour colonies (see Table 24); the increase in colonies was presumably due to their transfer from the commissariats of justice (see p. 24 above). Capital investment also increased substantially, from 749 to 1,359 million rubles – excluding Tsudotrans. For the time being the manpower of the NKVD was still concentrated on the Moscow–Volga canal and BAM. Even in Dal'stroi, although gold production increased, the main achievement in 1935 was the building of roads which would enable the mining to take place.⁸⁸

(E) THE TRIUMPH OF THE RAILWAYS⁸⁹

Ever since the 1920s successive People's Commissars had complained bitterly that the railways were being required to work more intensively than before the revolution, but with far less material support.⁹⁰ In 1934 the anomaly began to be corrected, and investment increased more rapidly than in industry (see p. 81 above). But at the beginning of 1935 Narkomput' still complained, in a trenchant memorandum to Sovnarkom, that even in 1934 less rails had been supplied than in 1913 although the railways were carrying three times the pre-war load, were constructing more new lines than in 1913, and were still suffering from the worn-out track inherited from the first world war and the civil war. The memorandum accepted the 1935 plan for the rails to be allocated – 650,000 tons – but urgently demanded that the allocation should be greatly increased in the following years.⁹¹ A further memorandum dated February 28, written after the substantial increase in railway investment in the January version of the 1935 plan (see p. 131 above), acknowledged that the monetary allocation would be sufficient to cover the planned capital projects, but

⁸⁷ *Istoriya Stalinskogo Gulaga*, iii (2004), 133–4.

⁸⁸ For details see Shirokov (2000), 88–91.

⁸⁹ These developments are discussed in more detail in Rees (1995), 106–32, and Rees, ed. (1997), 217–25 (Rees).

⁹⁰ See Carr and Davies (1969), 272, 819–20.

⁹¹ *Zheleznodorozhnyi transport* (1970), 257–9 (published from the archives, n.d. [early 1935]).

insisted that the physical allocation of materials and equipment was insufficient. At this time of high priority to the railways, a Sovnarkom decree soon agreed to increase the allocations.⁹²

The importance of the railways was demonstrated to the Soviet population by the appointment of Kaganovich, Stalin's deputy in the party, as People's Commissar for the railways (see p. 100, n. 54 above). Later in the year, at a reception for railway personnel on July 30, Stalin, hailed by Kaganovich as 'the engine driver of the locomotive of the revolution', declared that 'railway transport is of decisive importance for the existence and development of such a vast state as the Soviet state', and compared the role of the railways in the Soviet Union as a great land power with the role of maritime transport for Britain as a sea power. He called for an increase in the daily haul of wagons, which had already risen from 56,000 to 73,000, to a fairly modest 75,000–80,000.⁹³

The resources supplied to the railways in 1935 surpassed those in any other inter-war year. More locomotives, freight wagons, rails and sleepers were supplied than in any previous year since the revolution, and many major items reached their pre-war peak (see Table 17). This was also a peak year in the second five-year plan for the construction of new railway lines. Substantial progress was also made in the transfer from manual to automatic braking of goods wagons, long a major aim of Narkomput'; the new wagons were all equipped with automatic brakes.⁹⁴ This massive expansion required the cooperation of many industries subordinate to Narkomtyazhprom, especially machine building, building materials and coal. It received Ordzhonikidze's personal endorsement. He declared at the VII congress of soviets on January 31, 1935, that 'the fulfilment of the Stalin order (*Stalinskii zakaz*) for transport is a matter of honour for the whole of heavy industry'.⁹⁵

⁹² *Zheleznodorozhnyi transport* (1970), 260–2 (published from the archives).

⁹³ The first version of his speech referred more boldly simply to '80,000'. For this and other changes in the various versions of his speech see Nevezhin (2003), 92–110. The final version was published in P, August 2, 1935.

⁹⁴ For a heated discussion of the travails of brake manufacture, see RGAE, 4372/33/378, 181–186 (stenogram of meeting of Gosplan machine-building department, February 27, 1935, attended by representatives of Gosplan, Narkomput', Glavvagonprom and the principal brake factory). So many of the brakes so far manufactured, and of their connection hoses, were unaccounted for that the NKVD was called in to investigate.

⁹⁵ Ordzhonikidze, *Izbrannye*, ii (1957), 640.

Parallel with these increased resources, Kaganovich headed a very vigorous campaign to shake up railway organisation and improve productivity. In April, he strongly condemned the operations research institute of Narkomput', which had apparently claimed that a daily loading of 50,000–60,000 wagons was the upper limit in view of the state of the track and the availability of rolling stock. The 'anti-Soviet bourgeois limit theory' became a major object of opprobrium in this and later years, the equivalent of 'planning on the bottleneck' in planning as a whole (which had been subjected to obloquy since 1927).⁹⁶ Kaganovich was soon able to claim that right was on his side. In April, daily loading already reached 61,977 wagons, and by November it had risen to 75,651, exceeding the lower limit of Stalin's proposal.

Other indicators of railway performance also improved. By June the average commercial speed of goods trains reached 15.5 km an hour as compared with 14.9 in June 1934, and the average daily run of goods wagons rose from 175 to 188 km.⁹⁷ In July Kaganovich called for an increase in speed to 19.4 km, and the average daily run to 253 km, to be achieved by 'forcing the boilers'.⁹⁸

To reinforce the drive to increase effort and efficiency, on August 7 an order of Narkomput' increased the basic pay of locomotive drivers and their assistants by 10–20 per cent, and increased piece payments, which were mainly paid on a per-kilometre basis. Similar increases were provided for other railway workers, and for managers of railway stations and repair points. Engine drivers who completed the year without an accident were to be awarded an extra month's pay; in the first instance this would be given for completing August–December 1935 without an accident. At the same time overtime in excess of a standard eight hours (or 192 hours a month) was forbidden.⁹⁹

In September Kaganovich reported to Stalin, who was on vacation in Sochi, that 'the calm marsh has been stirred up'; 'the managers are compelled to improve because they are under pressure not only from above, but from below from the engine driver and guards'.

⁹⁶ In 1937 the young British research student Jacob Miller, later a founder of the journal *Soviet Studies*, was fervently addressed about the triumph achieved in overcoming the limit, in an interview he secured with a Gosplan official (personal communication). For planning on the bottleneck, see Carr and Davies (1969), 794–9, and vol. 3 of the present series, pp. 480–1.

⁹⁷ *Osnovnye pokazateli*, January 1936, 80.

⁹⁸ See Rees (1995), 120.

⁹⁹ *Zheleznodorozhnyi transport* (1970), 261–8. The seven-hour day ('which is not in fact observed', according to the order) was abolished.

Drivers had reported that 'for the first time I have dinner with my family at a definite time'. When one driver returned home the same day after an eight-hour shift, 'his wife guessed that the train must have been cancelled and did not believe he had already been there and back'.¹⁰⁰

Stakhanovite-like feats preceded Stakhanov's own success on the night of August 31. On July 1, a Donetsk engine driver, P. F. Krivonos, increased the speed of his train to 31.9 km an hour. By December the railway equivalent of Stakhanovism claimed 69,000 'Krivonosites'.¹⁰¹

The speed-ups proposed by Kaganovich in July were not entirely achieved. By October the average speed reached 18.4 km, and the daily run 223 km; this was the 1935 peak.¹⁰²

The greater strain placed on rolling stock and track by the more intensive operations made it necessary to expand the Narkomput' network of railway factories and workshops, and repair shops and repair points. In 1935 as a whole the number of basic railway employees increased by 11.2 per cent, but the number working in railway factories and workshops increased by 15.8 per cent. By December the gap was still wider.¹⁰³

The Gosplan volume on the 1936 plan reported that, as a result of all these exceptional efforts, in 1935 'railway transport climbed steeply to the heights'. The freight plan had been exceeded by 6.9 per cent, and delays had been greatly reduced, and industries such as iron and steel had been able to build up stocks of raw material.¹⁰⁴ The freight carried by the railways increased by 25.5 per cent in 1935, from 205,700 to 258,100 million ton-km. By December 1935 the total stock of wagons was 12.2 per cent greater than in December 1934, and they were used more intensively.¹⁰⁵

The huge increase in freight was achieved at the price of a decline in passenger transport. This was deliberate policy. Restrictions operated from the beginning of the year, and on April 27 they were strengthened by a secret decree of Sovnarkom and the party central

¹⁰⁰ SKP, 554 (letter dated September 5).

¹⁰¹ See Rees (1995), 123, 130.

¹⁰² *Osnovnye pokazateli*, January 1936, 80.

¹⁰³ *Osnovnye pokazateli*, January 1936, 162–3. The equivalent figures for December were 9.7 and 17.6 per cent. These figures exclude local repair shops; if these were included the gap would no doubt be wider.

¹⁰⁴ *Narodno-khoziaistvennyi plan 1936* (1936), 239, 242–3.

¹⁰⁵ *Osnovnye pokazateli*, January 1936, 84. The average daily haul per wagon was 128.4 km, 9.3 per cent greater than in the previous year.

committee which bluntly stated that too many passengers were being carried at the expense of freight, and that this was 'harming the national-economic interest of the country'. Passenger transport should be reduced by 15–30 per cent in 1935, especially on the major lines; official journeys should be cut by 30 per cent, and the number of excursions by rail should also be reduced. From May 15 trains travelling 600–700 km or less should carry only one sleeping car. Booking clerks should be inspected to prevent speculation.¹⁰⁶

These savage cuts were not achieved. The number of long-distance passengers was reduced from 37.6 to 36 million, but the average length of long distance journeys slightly increased, so the number of passenger-km on these journeys declined by only 2.1 per cent. The restrictions were slightly more effective on suburban lines. The total number of passengers on all types of journey declined from 945.2 million in 1934 to 919.1 million in 1935, and the average distance travelled declined from 76 to 74 km, so in terms of passenger-km the decline was 2.6 per cent. Trains were even more overcrowded. The standard measure used, 'the number of passengers carried per axle', increased from 8.1 to 8.4; the increase took place from June onwards, when the effort to increase freight transport was intensified.¹⁰⁷

The expansion of freight transport involved a large increase not only in investment but also in the number of people working on the railways. The number of manual and office workers in the basic labour force increased by 12.8 per cent in 1935, while the number in the economy as a whole increased by only 4.2 per cent. In consequence, the wage bill increased by 35.6 per cent as compared with the plan of only 25.7 per cent and the increase in the national wage bill of 27.7 per cent.¹⁰⁸

These developments confronted Narkomput' and the state budget with considerable financial difficulties. In 1934, the state budget already bore most of the burden of financing railway investment, but, partly compensating for this, in the current operation of the railways income (5,716 million rubles) exceeded expenditure (4,829 million) by 887 million rubles. The 1935 budget estimated that the net profit on current operations would be reduced to 693 million rubles (income 6,554 and expenditure 5,861 million).¹⁰⁹ In the outcome, income was

¹⁰⁶ GARF, 5446/1/481, 17–18 (art. 789).

¹⁰⁷ *Osnovnye pokazateli*, January 1936, 78.

¹⁰⁸ For these figures see *Narodno-khoziaistvennyi plan 1935* (1935), 642–3, *Narodno-khoziaistvennyi plan 1936* (1936), 456–8 and *Osnovnye pokazateli*, January 1936, 138–9.

¹⁰⁹ *Otchet ... 1934* (1935).

67.3 million rubles less than planned and expenditure was 436.8 million rubles greater than planned, so the surplus on current operations amounted to only 189 million rubles. The shortfall in income from passengers was 324 million, while the income from freight was 268 million greater than planned. The substantial increase in expenditure above the plan was a result of unplanned increases both in the wage bill and in the cost of materials.¹¹⁰

The strain on the railways resulted in an increase in accidents. The total number of 'important accidents' (known as Group I accidents) increased from 64,000 in 1934 to 69,614 in 1935.¹¹¹ Incomplete monthly data indicate that accidents began to be more frequent than in 1934 in May, and were double the 1934 level in August, September and October.¹¹² On January 7, 1936, an order signed by Kaganovich conveniently changed the definitions of different types of accident, so that according to TsUNKhU 'as a result of the changes it has become difficult to compare the present data with those of previous years'.¹¹³ From April 1936 the confidential monthly bulletin of TsUNKhU ceased to publish railway accident data altogether.

(F) INTERNAL TRADE

(i) Retail trade and the rise of the market

The original draft plan for internal trade, drawn up several months before the decision to abolish rationing, envisaged that retail trade, including public catering, would amount to 76,200 million rubles in 1935 as compared with about 61,000 million in 1934. If the large price reduction in commercial and rural trade proposed by Gosplan were carried out, the 1935 figure would be reduced to 69,200

¹¹⁰ For details see *Otchet ... 1935* (1937).

¹¹¹ For 1934, see ZI, March 20, 1935. The 1935 figures are given in *Osnovnye pokazateli*, 1935, 123. The 1935 figure includes collisions (3,782), derailments (4,910), disconnections and decouplings (26,657), breaking of axles (without derailment) (332), breaking of rails when derailment occurred (199), ignoring signals or admitting trains to sections already occupied by other trains (8,870), other (21,854).

¹¹² Derived from data in *Osnovnye pokazateli*, March 1935, 98, April 1935, 88, May 1935, 58, July 1935, 60, August 1935, 69, September 1935, 91, October 1935, 92.

¹¹³ *Osnovnye pokazateli*, January 1936, 90.

million.¹¹⁴ The decision to abolish bread rationing authorised bread prices intermediate between the old rationed price and the old commercial prices, and involved a sharp increase in the average price of bread. The 1935 plan was increased to 80,000 million rubles (see p. 133 above).

In the upshot, total retail trade in 1935 amounted to 82,000 million rubles. The increased sale of grain products, including flour and bread, was the main component of the increase, amounting to 8,400 out of the total increase of 15,000 million rubles in the sale of food products.¹¹⁵ This was mainly due to the price increase.

The evidence about the increased consumption of flour, and of bread made from flour, is contradictory. The annual grain–fodder balances show a substantial increase. In the agricultural year July 1, 1933–June 30, 1934, a period in which most flour and bread was rationed throughout the year, 7.619 million tons of flour (including flour used to make bread) were distributed. In 1934/35, which included the first six months in which all flour and bread was sold freely off the ration, the equivalent figure was 9.837 million tons, an increase of 29 per cent. In 1935/36, in which grain was sold freely off the ration for the whole twelve months, the equivalent figure was 11.83 million tons, a further increase of 20 per cent. So the total increase between 1933/34 and 1935/36 amounted to as much as 55 per cent.¹¹⁶

However, the Narkomtorg data on flour and bread sales, which we used in Khlevnyuk and Davies (1999), show a smaller increase. According to these data, the ‘market fund’ of flour increased by only 5.3 per cent, from 11.39 to 11.99 million tons.¹¹⁷ The increased sale of grain products, mainly in the form of bread, was, however, according to the Narkomtorg data, particularly large in the countryside, where bread and flour were previously available from the state only to a relatively small minority of the population.¹¹⁸

¹¹⁴ RGAE, 4372/133/122, 135–132 (dated July 18, 1934). The decree of July 29 proposed, however, that retail prices should decline by only 2,000–3,000 million rubles, so the total planned trade would amount to 73,000–74,000 million (for this decree see p. 118 above).

¹¹⁵ *Sovetskaya torgovlya v 1935* (1936), 66.

¹¹⁶ Derived from data in RGAE, 4372/35/548.

¹¹⁷ *Sovetskaya torgovlya v 1935* (1936), 46.

¹¹⁸ The ‘market fund’ of flour supplied to the countryside increased by 19 per cent, while the urban increase was only 1.5 per cent (*Sovetskaya torgovlya v 1935*

This general picture of the situation in the countryside is partly supported by the evidence from the peasant budgets. These indicate that consumption in the first quarter of 1935 was actually *less* than in the equivalent months of 1934. This is not surprising given the chaos in rural supplies immediately after the abolition of rationing (see pp. 142–7). But from the second quarter onwards peasant consumption was consistently substantially higher than in the previous year, but by a fairly small amount. In 1935 as a whole, consumption per head was 7.1 per cent greater than in 1934, and in the nine months after the chaos of January–March 1935, consumption exceeded consumption in April–December 1934 by 10.9 per cent.

Peasant consumption of grain per day per head, 1934–35 (grams)

	1934	1935
January–March	678	664
April–June	621	681
July–September	597	673
October–December	570	628
Whole year	617	662

Sources: derived from peasant budget data in RGAE, 1562/77/5^a, 1562/80/1.

In general, retail trade as a whole increased more rapidly in the countryside than in the towns, the main factor being the increase in the sale of grain products.¹¹⁹

(1936), 53). Of seven other major items of food, supplies to the countryside increased more rapidly than supplies to the towns in four cases (fats, vegetable oil, sugar and salt) and less rapidly in three cases (meat, butter and tea).

¹¹⁹ Urban and rural retail state and cooperative trade, 1934–35 (million rubles at current prices):

	1934	1935	Percentage increase
Urban	45690	58762	28.6
Rural	16125	22609	40.2
Total	61815	81371	31.6

71.2 per cent of the increase in rural trade was accounted for by the increase in the sale of grain products.

(*Sovetskaya torgovlya v 1935* (1936), 60–1).

Retail sales declined only for one major item of food and drink: vodka. Sales amounted to 7,306 million rubles as against 7,339 million in 1934.¹²⁰ In August 1935, the head of Glavspirt complained that the retail price, 11 rubles per litre, was too high: it could not compete with samogon (hooch), which was 60–65° proof as compared with only 40° for legal vodka, and was available for only 7 rubles. He therefore proposed to reduce the retail price to 8 rubles. This proposal was firmly rejected by Narkomfin, which produced figures to show that sales would have to climb to unrealistic heights to compensate for the loss in revenue which the price reduction would entail.¹²¹ It is not clear how far the relative decline was due to lack of demand, and how far to the insufficient supply.¹²²

The partial collapse of public catering continued throughout the year. Its turnover increased by a mere 2.3 per cent, measured in current prices. The average price of a dish was 57 per cent higher than in 1934. The number of dishes sold declined by as much as 35.7 per cent.¹²³

In 1935 as a whole, retail prices increased substantially. According to the Russian economist Malafeev, food prices as a whole increased by 20.1 per cent.¹²⁴ This is probably an underestimate. A comparison of the market fund in fixed prices in 1934 and 1935 with retail trade in current prices in the same years indicates an increase in food prices by over 30 per cent. But as the prices of industrial and other ‘non-food’ goods declined slightly, retail prices *as a whole* rose by about 16 per cent, as the following table shows:

¹²⁰ *Sovetskaya trgovlya v 1935* (1936), 66–7.

¹²¹ Memoranda of August 20, 1935 (A. Golinskii to Molotov) and September 16 (Narkomfin) (GARE, 5446/16^a/120, 1–5).

¹²² Production amounted to 6,411,000 hectolitres in 1935, 2.5 per cent less than in 1934 (*Osnovnye pokazateli*, 1935, 24–5). According to *Sovetskaya trgovlya v 1935* (1936), 66–7, stocks of vodka in fact (contrary to the fears of Glavspirt) declined from 630 to 613 million hectolitres in the course of 1935.

¹²³

	1934	1935
Turnover (million rubles)	7042	7206
Number of dishes (million)	10834	6907
Average price per dish (kopeks)	66.5	104.3

(*Sovetskaya trgovlya v 1935* (1936), 120, 122. There was some increase in the meat content of the average dish (*ibid.* 126).

¹²⁴ See Malafeev (1964), 204.

Internal trade in 1934–35
(million rubles)¹²⁵

	1934	1935	% increase	
<i>A. Market fund</i>				
(1935 transfer prices)				
Food products	39161	43026	9.9	
Non-food products	14776	18089	20.4	
Total	53957	61114	13.3	
<i>B. Retail trade</i>				
(current prices)				
				<i>Implied price increase</i>
Food products	38495	55616	44.5	31.5
Non-food products	23320	27754	19.0	−1.2
Total	61815	82371	31.6	16.2

The main source of the increase was the rise in the general level of bread and flour prices in June 1934 and at the beginning of 1935. According to a Soviet calculation made in the 1930s, retail prices declined as a result of the price changes in October 1935. Total retail trade in food products in the year October 1, 1935, to September 30, 1936, amounted to 41,470 million rubles in prices prevailing before October 1, 1935, but only 36,268 million rubles in the prices prevailing from October 1, 1935. This amounted to a price reduction of 12.5 per cent, 7.2 percentage points of which was due to the reduction in bread prices. The calculation claimed that there was a net reduction in the prices of sugar, confectionery and sausages, and a net increase in the prices of meat, butter, vegetable oil, fish and herrings.¹²⁶ But an estimate for the town of Ivanovo, while also showing that retail prices declined after October 1, 1935, produced somewhat different results. This calculated the trade turnover for food products

¹²⁵ *Sovetskaya torgovlya v 1935 godu* (1936), 43, 66–7. ‘Retail trade: food products’ includes public catering. The implied price increase was obtained by the present authors, by dividing the increase measured in current prices by the increase measured in 1935 transfer prices.

¹²⁶ RGAE, 1562/151/42, 79–80, cited in Malafeev (1964), 201–2.

in April–June 1935 in both current prices and prices introduced on October 1, 1935. While there was a net decline in prices of 5.1 per cent, this was solely due to a fall in the prices of bread products by 12.6 per cent. The net increase in the prices of the commodities freed from rationing on October 1 was 8.2 per cent; the price of meat and meat products more than doubled.¹²⁷

The supply of grain products from the state was supplemented by sales on the kolkhoz market by collective farmers and by kolkhozy. In 1935 these sales substantially increased: the total in terms of grain was estimated at 1,002,000 tons as compared with 710,000 in 1934.¹²⁸ The market prices for grain products fell irregularly but persistently throughout 1935; on average they were estimated at 57.6 per cent of the 1934 level.¹²⁹ As early as June a Narkomfin report noted in the case of grain and vodka that prices for free sale in the socialised sector were higher than the prices on the kolkhoz market;¹³⁰ this was probably exceptional at this time. A report prepared in Narkomvnutorg after the new harvest noted that the ‘huge rift’ between market (bazaar) and state prices was being closed. According to the report, there was now entirely enough bread in the shops, and, in contrast to previous years, market prices had continued to fall at the beginning of the 1935 grain delivery campaign; in a number of districts bazaar prices were now lower than state prices.¹³¹ This report is confirmed by the data available from different towns about the prices for flour on the kolkhoz market; on the whole prices continued to fall even during the period of the grain deliveries, when kolkhoz trade in grain products was illegal (see Khlevnyuk and Davies (1999), Table 10). All this is clear evidence that the supply of grain products in state and cooperative shops had substantially improved.

For food products as a whole, prices on the kolkhoz market declined by about 25 per cent in 1935.¹³² The amount of food sold substantially increased in physical terms; so in terms of current prices sales increased by 3.6 per cent.¹³³

¹²⁷ *Plan*, no. 20, 1935, 38, cited in revised form by Malafeev (1964), 202–3.

¹²⁸ *Narodno-khozyaistvennyi plan na 1936 godu* (1936), 432–3. For much higher figures for both years see Table 4 (b).

¹²⁹ *Sovetskaya trgovlya v 1935 godu* (1936), 157–8.

¹³⁰ RGAE, 7733/13/184, 28–29 (probably completed on June 7).

¹³¹ RGAE, 7971/2/8, 152–56.

¹³² According to data in *Sovetskaya trgovlya v 1935 godu* (1936), 157, kolkhoz market prices for 25 food products in 75 towns declined by 24.7 per cent – vegetable prices by 35.2, meat and dairy prices by 22.8 per cent. In December 1935 kolkhoz market prices had fallen by 29.7 per cent as compared with December 1934.

¹³³ For the data in physical terms see Khlevnyuk and Davies (1999), 599.

Narkomvnutorg embarked on a determined effort to further the interests of the consumer. Veitser insisted that trade managers must abandon their 'dependents' psychology', and seek actively to influence those who supplied them with goods.¹³⁴ The trading organisations must influence industrial production, which required 'the legitimisation of the holiness of the contract, which no-one must violate'. Contracts must be enforced through the courts. At the same time, independent sources of production must be encouraged: artisans must be supplied with more raw materials, and their production must be directed towards the market. Planning must be 'narrowed still further' by increasing the role of the market: 'perhaps we will buy 50% of confectionery by contract and plan to get 50% on the market'.¹³⁵ At the same time the trading organisations must educate the tastes of the consumer.¹³⁶

The fundamental changes which would ensue were sketched out in enthusiastic terms in documents preserved in the Narkomvnutorg files. According to one report, the unified prices after the abolition of rationing meant that 'trade systems ... engage in a broad emulation (*sorenovanie*) between each other in the struggle for the consumer', and the kolkhoz market was also 'a serious competitor for all state and cooperative trading systems'. Sales agencies and trade centres must 'systematically study the demand of the population and the market conditions (*kon'yunktura*) of particular districts, the seasonal fluctuations and the shifts in demand'. The trading system should 'pay close attention to the availability of central and local supplies and the level of bazaar prices'.¹³⁷ Another report optimistically concluded that 'a number of concepts associated with the rationing period have been passing into history, including 'acquire (*dostat'*)', 'they give us (*dayut*)', 'get (*poluchit'*)' and 'swap (*vymenit'*)'. The ruble was becoming the basic incentive.¹³⁸

The dual policy pursued by Narkomvnutorg was both contradictory and complementary. It used its powers to impose higher standards and closer correspondence of supply with consumer demand, putting pressure on both industry and its own trading organisations. At the same time it sought to widen the role of the market, which would increasingly ensure that appropriate goods were available in the right quantities: this of course required that prices should be at

¹³⁴ See Hessler (2004), 218.

¹³⁵ RGAE, 7971/2/236, 190–182 (speech dated August 26, 1935).

¹³⁶ See Fitzpatrick, ed. (2000), 194 (Hessler).

¹³⁷ RGAE, 7971/2/8, 165–174 (unsigned, n.d. [summer 1935?]).

¹³⁸ RGAE, 7971/2/8, 159 (unsigned, n.d. [June–July 1935]).

a level to balance supply and demand. Prices in socialised trade were fixed by the state, but Narkomvnutorg sought to make them more flexible.

In spite of improvements in the availability of most products, the food market remained imperfect. At the end of 1935, Gosplan complained that 'choice in the shops is still poor, and does not correspond to the growing requirements of the Soviet consumer'.¹³⁹ The situation was worse in the smaller towns and in the countryside. A correspondent from Belorussia complained that 'the towns are saturated with sugar, while in a very high proportion of rural cooperatives sugar is in short supply or not available at all'.¹⁴⁰ On the other hand, examples were already appearing of consumers no longer simply accepting what was available: one of Veitser's deputies complained that huge quantities of an unwrapped boiled sweet remained unsold.¹⁴¹

The situation was usually far worse with industrial consumer goods; their retail prices were fixed substantially lower than demand, and there was no rival legal free market on which they were readily available. They were still distributed by a largely-informal rationing system.

In spite of these efforts to introduce more flexibility into retail trade, the sources of the supply to state and cooperative trading organisations remained largely centralised. Over 90 per cent of the supplies to state trading organisations and 78 per cent of the supplies to consumer cooperatives were obtained from state industry, the remainder from artisan cooperatives and from the trading organisations' own farms and allotments.¹⁴²

An internal memorandum of Narkomvnutorg lambasted continuing corruption:

There is still a large number of violations of Soviet price policy, of cases of deception of the consumer, embezzlement and theft, especially in rural cooperation, while the struggle against speculation on kolkhoz markets is clearly insufficient.¹⁴³

¹³⁹ *Narodno-khozyaistvennyi plan 1936* (1936), 45.

¹⁴⁰ *EZh*, September 4, 1935 (A. Perovskii).

¹⁴¹ See Gromow (2003), 92–3. See also the example of vodka, p. 148, n. 56 above.

¹⁴² Of total retail trade in 1935, amounting to 71,244 million rubles (excluding public catering), 61, 859 were supplied by state industry, 2,045 by artisan and invalid cooperatives, 3,788 from the trading organisations 'own economy', the remainder (3,552) from other sources (*Sovetskaya torgovlya v 1935 godu* (1936), 105).

¹⁴³ RGAE, 7971/2/8, 196 (unsigned, n.d. [second half of 1935]).

The number of cases brought against officials in the main trading agencies of Narkomvnutorg increased from 40,677 in 1934 to 53,538 in 1935.¹⁴⁴

(ii) *Reform of the trade network*

Following its establishment in 1934, Narkomvnutorg acquired powers crucial for the transformation of Soviet trade, with Stalin's support. In a letter to Zhdanov dated September 6, 1934, he wrote:

First, the canteens must be transferred to Narkomvnutorg (this must be stated clearly). Secondly, consumer cooperation (which is not a state organisation) should be subordinated to Narkomvnutorg (which is a state organisation) over prices and also the rules and norms of trade.¹⁴⁵

Three further crucial functions were included in the structure of the commissariat approved by Sovnarkom on September 11, 1934.¹⁴⁶ First, the Committee of Commodity Funds (KTF) (see vol. 4, p. 205) attached to STO was abolished, and its functions transferred to Narkomvnutorg, especially to its department of price control. This department was responsible for retail prices, though its major decisions had to be endorsed by STO or Sovnarkom. Secondly, a department of kolkhoz trade and bazaars supervised the kolkhoz market. Thirdly, a State Trade Inspectorate was established on the basis of the price inspectorate of Narkomfin, which was transferred to Narkomvnutorg. A further decree on the Inspectorate stated that its functions included the supervision of retail prices and of sanitary conditions in trade premises. It included agencies at district level and above, and had the right, if the law was violated, to impose fines of up to 250 rubles or initiate prosecutions.¹⁴⁷ A clause in the draft decree giving the Inspectorate the right to verify the weight and dimensions

¹⁴⁴ *Sovetskaya trgovlya v 1935 godu* (1936), 215. The listed offenders included every type of staff working in the trade network. The most numerous categories were 'heads of trade enterprises' and 'sales persons'. For unexplained reasons, the number prosecuted in the former category decreased from 22,086 in 1934 to 12,828 in 1935, while the number in the latter group increased from 4,586 to 23,590.

¹⁴⁵ RGASPI, 558/11/730, 17, 18–20, published in *Bol'shaya tsenzura* (2005), 340–1.

¹⁴⁶ SZ, 1934, art. 375; for further details see Neiman (1935), 310. Numerous other departments and administrations formed part of Narkomvnutorg.

¹⁴⁷ SZ, 1934, art. 412 (dated October 19).

of goods was resisted by Molotov but reinserted on Veitser's insistence.¹⁴⁸ The Inspectorate was extremely active throughout 1935.

In November 1934 Veitser made a further attempt, this time unsuccessfully, to widen the functions of Narkomvnutorg. He raised with the Politburo a proposal that his commissariat should take over the management of decentralised agricultural collections from Komzag. The Politburo established a commission on this question, and the minutes of the preliminary meetings of the commission make it clear that this was not merely a bureaucratic proposal to augment the powers of the commissariat. Addressing the meeting, Veitser explained:

Our thinking is that Komzag must concern itself when the collection of a product has the character of a tax, while what is intended to be commodity turnover should be our responsibility.

On behalf of Komzag Kleiner strongly objected that this transfer would greatly harm the centralised collections, because Komzag would lose its present right to forbid decentralised collections when centralised collections were going badly. Zhdanov, in the chair, supported Kleiner. Addressing Veitser directly, he insisted that his proposal would give too much independence to the kolkhozy:

There is one thing you do not understand. The main problem is that you will defend the interests of the kolkhozy against the towns, trade will dictate this to you ... The main lever to control the price of every commodity and food product is that these goods are in the hands of the state.¹⁴⁹

Veitser was an enterprising and enthusiastic commissar, and in 1935 made large strides towards the modernisation and marketisation of retail trade. On May 16, 1935, Sovnarkom agreed to transform the wages system in Soviet trade. Henceforth the wage bill was to be calculated as a definite percentage of trade turnover, and an increased proportion of the individual wage was to be based on sales actually achieved. In addition, the role of bonuses was to be

¹⁴⁸ See Rees, ed. (1997). 199–200 (Barnett). However, Veitser's proposal to include verification of the 'appropriate quality' of goods did not appear in the decree.

¹⁴⁹ RGASPI, 77/1/418, 1–9 (dated November 21, 1934), published in *Stalinskoe Politburo* (1998), 50–5. Zhdanov was the Politburo member responsible for the department for planning finance and trade of the party central committee (see *ibid.* 141–142, dated June 4, 1934). Narkomvnutorg was already responsible for all the state collections of fruit and vegetables.

enhanced, and the gap between skilled and unskilled in the wage scale was widened.¹⁵⁰

A prominent feature of the activity of Narkomvnutorg in 1935 was its extension of the practice, initiated by Mikoyan in Narkomsnab in 1933, of establishing large model shops on Western lines, displaying a greater range of goods and providing better services. These were in charge of two special agencies of the commissariat, Soyuzprodmag and Soyuzunivermag:

Number of specialised shops¹⁵¹

	<i>January 1, 1934</i>	<i>January 1, 1935</i>	<i>January 1, 1936</i>
Soyuzprodmag	63	213	422
Soyuzunivermag	2	8	14

Soyuzprodmag was responsible for the chain of specialised bakeries (*bakaleyi*) and food stores (Gastronomys), and Soyuzunivermag for the department stores selling consumer goods. Although the number of these specialised stores doubled in 1935, they still amounted to only 0.2 per cent of the total number of retail trade outlets, and were responsible for only 4.5 per cent of retail turnover, as compared with 2.5 per cent in 1934.¹⁵² In addition, a large number of relatively well-equipped bread shops were opened when bread rationing was abolished.¹⁵³

The new shops were usually located in the large towns, which also absorbed a disproportionate share of retail trade in general. The ten towns and one industrial district (the Donbass) classified as 'most important' were supplied, depending on the product, with between 34.5 and 75.7 per cent of the total sales of the key food products. Moscow and Leningrad were particularly well-favoured, receiving in most cases well over half of these products. Yet the population of these eleven 'most important' locations amounted to only about 30 per cent

¹⁵⁰ See Neiman (1935), 347.

¹⁵¹ *Sovetskaya torgovlya v 1935* (1936), 134–5.

¹⁵² *Sovetskaya torgovlya v 1935* (1936), 62, 134–5.

¹⁵³ See Fitzpatrick, ed. (2000), 186–7 (Hessler).

of the urban and 7.5 per cent of the total population; the equivalent figures for Moscow and Leningrad alone were 14.2 and 4.1 per cent.¹⁵⁴

Even at the end of 1935 most shops remained old-fashioned, with old equipment, and were staffed by sales assistants accustomed to handing out rations and scarce goods from a position of effortless superiority. According to the major trade census, taken on April 15, 1935, only 4.2 per cent of the 277,800 sales assistants had completed secondary education; a further 25.2 per cent had received some kind of 'special training'. Even among the 67,000 'leading staff' working in Soviet internal trade, only 14.2 per cent had completed secondary education.¹⁵⁵

In the countryside, retail trade was conducted in very small units. There were 135,542 trading enterprises in total. Their staff amounted to only 219,505, and a mere 149,558 of these worked directly in the shops, 1.04 per shop. At the heart of rural trade were the 90,798 village cooperatives (*sel'po*) in the Tsentrosoyuz consumer cooperative system; their staff amounted to 140,598, of which 94,427 worked directly in the shops.¹⁵⁶ Naturally the turnover of these shops was

¹⁵⁴ Sales of main food products in eleven 'most important' towns, October–December 1935 (tons):

	<i>Moscow and Leningrad</i>	<i>All eleven towns</i>	<i>Total retail sales</i>	<i>Moscow and Leningrad: percentage of total</i>	<i>All eleven towns percentage of total</i>
Butter	7641	11708	19146	39.9	61.2
Vegetable oil	2656	4295	9005	29.5	47.7
Margarine	900	2417	4711	19.1	51.3
Sugar	19629	35859	83176	23.6	43.1
Meat	16677	25751	34005	43.0	75.7
Meat products	14165	19976	33493	42.2	59.6
Fish	12218	21172	60871	20.1	34.5
Herrings	7409	14029	29596	25.0	47.4

Source: calculated from data in *Osnovnye pokazateli*, 1935, 232–5.

Note: These figures do not include bread or other grain products. The towns were Moscow, Leningrad, Baku, Kiev, Dnepropetrovsk, Khar'kov, Gor'kii, Ivanovo, Sverdlovsk, Chelyabinsk and 'the Donbass'. Their population, except the Donbass, on January 1, 1935, is given in *Trud* (1936), 4; we have assumed the urban population of the Donbass is about 1.8 million. The population of Moscow and Leningrad amounted to 6,382,000, and of all ten towns plus Donbass to about 12 million. We have assumed an urban population of about 45 million and a total population of 159 million.

¹⁵⁵ *Sovetskaya trgovlya v 1935* (1936), 153, reporting the results of the census.

¹⁵⁶ *Vsesoyuznaya trgovaya perepis' 1935g*, i (1935), 6–9. In addition there were 13,908 stalls and booths (*palatki*) with a total staff of 14,993.

also small. Each *sel'po* had an average turnover of 17,100 rubles in January–March 1935, and each shop or stall of 15,200 rubles. This compares with an urban turnover in the same period of 135,900 rubles per shop and 27,300 per stall or booth.¹⁵⁷

Before the end of the year a major reform further strengthened the role of Narkomvnutorg by restricting Tsentsosoyuz and the consumer cooperatives to rural trade. A Sovnarkom decree dated September 29 instructed Tsentsosoyuz that all its urban shops and stalls, except those in small towns, were to be transferred to Narkomvnutorg, and all its public catering establishments were to be transferred either to Narkomvnutorg or to the factories and other establishments to which they were attached.¹⁵⁸ By the end of the year, 16,048 shops and 5,024 stalls had been transferred, increasing the total number of shops and stalls under Narkomvnutorg by 88 per cent.¹⁵⁹ Tsentsosoyuz also relinquished over 10,000 urban canteens, restaurants and snack bars.¹⁶⁰ The transfer was not smooth. Many former cooperative shops in the towns remained boarded up for months.¹⁶¹ A further decision, effective from October 1, 1935, transferred the extensive retail networks of both the military and the NKVD from Tsentsosoyuz to Narkomvnutorg.¹⁶²

A further decree on September 29, 'On the Work of Consumer Cooperatives in the Countryside', was promulgated by Sovnarkom and the party central committee on Stalin's initiative.¹⁶³ The decree sharply criticised the 'major faults' of the cooperatives:

The network of rural shops and *sel'po* is organised into units which are too small. Industrial consumer goods such as clothing, footwear, textiles, etc. are divided out among tiny little shops (*lavchenki*) and are

¹⁵⁷ *Vsesoyuznaya torgovaya perepis' 1935g*, i (1935), 6.

¹⁵⁸ SZ, 1935, art. 428. The retail trading organisations serving the military and the Narkomvnutorg troops were also to be transferred from the cooperative system to Narkomvnutorg (SZ, 1935, art. 462, dated October 17, and art. 534, dated December 9).

¹⁵⁹ Estimated from data in *Sovetskaya torgovlya v 1935* (1936), 136–7.

¹⁶⁰ *Sovetskaya torgovlya v 1935* (1936), 148–9. Of these 1,017 were transferred to Narkomvnutorg, the rest to other organisations.

¹⁶¹ See Hessler (2004), 208.

¹⁶² This was a joint decision of Tsentsosoyuz and Narkomvnutorg (see *Istoricheski arkhiv*, 1, 2006, 176).

¹⁶³ SZ, 1935, art. 427. The decree was approved by the Politburo on September 25 (RGASPI, 17/3/971, 150–154). For Stalin's initiative, see the resolution of the Commission of Soviet Control reported in EZh, May 30, 1936.

unable to provide the product mix needed by the consumer. Moreover, in many *sel'po* there is a shortage of salt, soap, sugar, tobacco, and other daily necessities, many *sel'po* exist only on paper.

Moreover, bribery and malfeasance were widespread, and many small stores worked at a loss. The decree ruled that small village stores with inadequate turnover were to be closed, and in sparsely-populated districts a single district cooperative should replace the village stores. At the same time, 5,000 large rural shops should be opened at a district level in addition to the 4,000 which already existed. Wages for the heads of village stores were to be increased by 25–33 per cent; the heads of village stores with higher turnovers received the largest percentage increase. The wage bill for those working in the stores, following the decree of May 14, should be allocated as a percentage of trade turnover.

As a result of the decree, about 17,000 of the 117,500 rural co-operative stores and about 600 of the 5,500 stalls were closed by the end of the year.¹⁶⁴ During October–December, 1,410 of the planned district rural shops were opened, and the number increased to 3,000 in the next few months.¹⁶⁵

These reforms exemplified one of the persistent paradoxes confronting the Soviet leadership. Economies of scale were achieved by centralisation and by reducing the size of the trading unit. But this conflicted with the efforts to encourage competition within the socialist sector. Instead of competing state and cooperative shops, all urban retail trade, with the important exception of *kolkhoz* trade in basic food, was now managed by *Narkomvnutorg*, which had to organise competition between its own organisations. And the economy drive meant that peasants in remoter rural areas had to travel much further in order to obtain food and consumer goods from the socialised sector. The total number of rural trading organisations had declined to 153,533 on January 1, 1936, a smaller number than three years previously.¹⁶⁶

(G) FOREIGN TRADE AND THE BALANCE OF PAYMENTS

(i) *Foreign trade*

The year 1935 was the third in which a positive balance of trade was achieved. But the volume of foreign trade continued to decline: it

¹⁶⁴ *Sovetskaya torgovlya v 1935* (1936), 138–9.

¹⁶⁵ *Narodno-khozyaistvennyi plan 1936* (1936), *EZh*, May 3, 1936.

¹⁶⁶ *Sovetskaya torgovlya v 1935* (1936), 138–9.

was well under half that of the late 1920s and early 1930s, and less than a quarter of the pre-revolutionary level.

In the initial 1935 plan of Narkomvneshtorg approved by the Foreign Currency Commission (VK – *Valyutnaya komissiya*), exports amounted to 351 million gold rubles. This level of export was taken for granted in the discussions which followed, but some major items were challenged. Gosplan proposed that petrol exports should be cut from 1,085,000 to 900,000 tons, because otherwise the petrol remaining for use by the greatly increased number of lorries would be insufficient.¹⁶⁷

In the outcome, exports were somewhat greater than planned, amounting to 367 million rubles, largely because prices were higher than expected.¹⁶⁸ But the amount remained 12 per cent lower than in the previous year. Exports declined for a number of major items. The export of oil still amounted to 13.8 per cent of production in spite of the growing demands for this extremely scarce commodity, but this was 22 per cent less than in 1934. On the other hand, following the good harvest, grain export, drastically reduced in 1934 (see p. 57 above), was almost restored to the 1933 level.¹⁶⁹ But, with the world price of grain still extremely low, grain and grain products provided only 11 per cent of all exports by value, while timber and fur continued to be mainstays of export, accounting for 33.2 per cent of the total.

The situation with imports was more complicated. Planned imports amounted to only 156 million rubles, a mere 44 per cent of exports; the surplus on the balance of trade was therefore planned to be 195 million rubles, slightly higher than in 1934.¹⁷⁰ Gosplan proposed that rubber import should be increased from 37,000 to 41,000 tons, because internal supplies of synthetic rubber would be over 30 per cent less than the planned increase in tyre production. It also proposed that additional leather should be imported for the boot and shoe industry. Gosplan neatly reduced the proposed level of import prices so that the total value of exports would remain virtually unchanged.¹⁷¹

¹⁶⁷ GARF, 5446/27/102, 17–16, dated January 15, 1935 (memorandum from I. Ginzburg, head of the Gosplan foreign trade sector, to Kuibyshev, Chubar' and Mezhlauk). In the event only 658,000 tons were exported.

¹⁶⁸ For details see GARF, 5446/26/64, 114–113 (memorandum from Svanidze to Chubar', n.d. [1936]).

¹⁶⁹ On June 17 the Politburo resolved to export one million tons of grain by the end of 1935 (RGASPI, 17/162/18, 70), but on September 19 increased this to 1.6 million tons (RGASPI, 17/162/18, 146). Actual export was 1,558,000 tons.

¹⁷⁰ See GARF, 8418/3/11, 1 (VK minutes dated January 8).

¹⁷¹ GARF, 5446/27/102, 17–16, dated January 15, 1935. In fact rubber imports amounted to 38,300 tons.

During the course of 1935 many successful claims were made for additional imports. These included:

equipment for the ZiS and GAZ automobile works and the Chelyabinsk tractor factory;¹⁷²
 additional imports of scarce industrial materials, including ball bearings;¹⁷³
 an American refrigerator for the Lenin mausoleum and substantial American equipment for the Palace of the Soviets.¹⁷⁴

In the new atmosphere it was no longer assumed that consumer goods should be automatically treated as of low priority; additional imports included modern printing machines, equipment for the glass industry, and Charlie Chaplin's *Modern Times*, the famous film satirising capitalist speed-up.¹⁷⁵ And in June, in order to balance the state budget, both additional imports and cuts in exports of consumer goods were authorised, amounting in all to 3.4 million gold rubles (see pp. 152–3 above).

Simultaneously, many successful claims were made by both the military and Narkomtiazhprom for increased imports for the armaments industries. On March 19 STO authorised, on behalf of the Commission of Defence, the import of six Gnom and Ron aircraft engines.¹⁷⁶ A STO decree of May 22 ordered substantial additional imports of non-ferrous metals valued at 2.76 million gold rubles.¹⁷⁷ Then, following Tupolev's extensive visit to the USA, orders listed in a decree of August 26 included a Glenn-Martin hydroplane, Hispano-Suiza aeroengines and ten aircraft machine guns.¹⁷⁸

Some of these additional orders were not completed and paid for until the following year. But imports amounted to 241 million rubles, 55 per cent larger than the plan. The additional imports were largely financed by the additional foreign currency available from the credits

¹⁷² GARE, 5446/1/480, 145 (art. 404/50ss, dated March 11), 205–206 (art. 597/85ss, dated April 5); GARE, 5446/1/481, 78–80 (art. 956/149s, dated May 21).

¹⁷³ GARE, 5446/1/482, 156 (art. 1762/284s, dated August 10).

¹⁷⁴ GARE, 5446/1/481, 81 (art. 962/150ss, dated April 22), 7–14 (art. 780, dated April 26), GARE, 5446/1/482, 179 (art. 1832/302ss, dated August 19). The last two references both refer to the Palace of the Soviets.

¹⁷⁵ GARE, 5446/1/483 (art. 2201, dated September 29), 121 (art. 2395/395ss, dated October 26), 101 (art. 2271/376ss, dated October 8).

¹⁷⁶ GARE, 8418/28/6, 56–57; the cost was 155,000 gold rubles.

¹⁷⁷ GARE, 8418/28/6, 181–191.

¹⁷⁸ GARE, 8418/28/7, 85–86. For Tupolev's visit, see p. 205.

of 200 million Marks and 250 million crowns agreed with Germany and Czecho-Slovakia, which began to be utilised in 1935 (see p. 92 above).¹⁷⁹ But the continuous pressure for greater imports naturally worried the foreign trade officials.

(ii) *The balance of payments*

As a result of three years of a positive balance of trade, in 1935 the USSR succeeded in covering its obligations on its foreign debt, and achieved a positive balance of payments for the first time in the 1930s. On June 3, 1936, *Pravda* publicly announced in bold type:

The achievement by the USSR of a positive balance of payments is the culminating point of the development of the foreign trade of the Soviet Union in recent years.¹⁸⁰

In celebration of this achievement, and as part of the tentative Soviet preparation to restore the ruble as an international currency. *Pravda* quite exceptionally published the following table in million rubles, showing a surplus of 34 million rubles (estimated at \$30 million).¹⁸¹

<i>Income</i>		<i>Expenditure</i>	
1. From sale of exports (f.o.b.)	404	1. Cash payments for imports (c.i.f.)	193
2. Receipts from transport and insurance ^a	17	2. Budget expenditure in foreign currency ^c	13
3. Non-commercial transfers ^b	14	3. Interest on loans and credits	20
4. Receipts from tourism and from expenditure by foreign citizens	7	4. Technical assistance; erection work	5

(continued on next page)

¹⁷⁹ The availability of previously unused credits explains the difference between the export and import figures in the table below and in Table 20, and apparently amounted to some 85 million gold rubles (see BP, cxxix (1936), 70–1).

¹⁸⁰ The article, 'The Balance of Payments of the USSR', is signed by 'N. Stepanov'.

¹⁸¹ The table is given in the new nominal exchange rate of 3 French francs per ruble; we have converted it into the exchange rate prevailing in 1935 by dividing the figures in *Pravda* by 4.45.

5. Other receipts	37		
6. Gold sales	12		
Total on current account	491	Total on current account	231
		Surplus on current account	260
<i>Changes in credit</i>			
		Repayment of import credits	156
		Repayment of bank credits	70
		Total repayments	226
Net increase in foreign currency reserves of Gosbank of USSR in 1935			34

Notes [summarised from original article]:

^a Includes payments for maritime transport, servicing of foreign ships in Soviet ports.

^b Presumably includes remittances from abroad.

^c Maintenance of representatives of USSR abroad.

This achievement had required not only a positive balance of foreign trade but also the imposition of restrictions on the loss of invisibles. On the expenditure side, the amount of interest and repayments was dictated by the need of the Soviet Union to maintain its international image as a sound debtor. Expenditure on technical assistance was kept extremely low, following the decisions not to renew contracts with foreign engineers and to strictly limit contracts with foreign firms. In July 1935 the Politburo also decided to drastically limit expenditure on the Soviet foreign trade apparatus abroad. The overseas staff of Narkomvneshtorg (financed from item 2 on the expenditure side) was cut from 2,299 to 1,232, and the retail trade operations in petrol and fur in the United Kingdom were closed down.¹⁸²

Foreign currency in addition to export earnings was largely obtained through Torgsin, responsible for trade in foreign currency within the USSR (see p. 237 below). By 1935 the authorities had already decided to cease Torgsin operations at the beginning of 1936, but in 1935 they still amounted to some 10 per cent of all receipts in foreign exchange.

The other sources of foreign currency were income from transport, mainly maritime, and from gold exports, which were recorded

¹⁸² RGASPI, 17/162/18, 83 (dated July 10); these figures exclude trade in the East.

separately from other exports. In earlier years maritime trade mainly used foreign vessels and was an additional burden on the balance of payments, but by the end of 1935 the tonnage of the Soviet merchant fleet was 50 per cent greater than in 1913, and it carried all exports and some 40 per cent of imports.¹⁸³ Substantial foreign currency had previously been received from the sale of gold. But in 1935, although gold production increased, sales abroad were very small. The *Pravda* report on the balance of payments explained that this was a deliberate decision. It referred back to Stalin's statement at the XVI party congress in 1930 that 'we need more solid reserves of all kinds', including grain, commodities and foreign currency; and concluded with only a slight exaggeration:

In 1935 foreign trade did not require the export of gold to achieve its positive balance of payments. Moreover, the whole production of gold, and the gold collected by Torgsin, remained within the country.¹⁸⁴

(H) LABOUR AND LABOUR PRODUCTIVITY

The much slower growth of the non-agricultural labour force, characteristic of the previous two years, continued in 1935. As in 1934, it increased by 1.1 million persons, 5.8 per cent. The most rapid expansion was in trade (12.6 per cent) and on the railways (11.6 per cent). Employment in large-scale industry increased by 8.2 per cent. Within industry, the most rapid increases were in food, drink and tobacco (13.5 per cent) and in the vast machine-building and metal-working sector (MBMW) (16.1 per cent). These two branches accounted for two-thirds of the increase in employment in industry. The increase in trade and in the food industries reflected the greater attention to the consumer and the improvement in agricultural supplies to the consumer industries. The additional work force in MBMW manned the new and expanded factories which were brought rapidly into use at this time. In contrast, employment in the extractive industries – coal, oil and iron ore – and in the iron and steel industry remained constant or declined slightly. In these

¹⁸³ See BP, cxxviii (1935), citing *Vneshnyaya torgovlya*, 5–6 (1935).

¹⁸⁴ P, June 3, 1936.

industries the increase in production was due to the more intensive use of equipment.¹⁸⁵

Employment in the building industry declined substantially. On October 1, the high point of the building season, 2,377,000 workers were employed in building, 10.1 per cent less than on the same date in 1934, and 17.8 per cent less than on the same date in 1932.¹⁸⁶ The number employed in public catering, hard-hit by the abolition of rationing (see pp. 142–3 above) declined by 13 per cent.

Labour turnover in industry had reached a peak in 1931, when the number of workers leaving industry amounted to 137 per cent of the total labour force. Turnover fell slightly in 1932, and much more rapidly in 1933 and 1934. In 1934 it declined to 95.7 per cent, and in 1935 to 86.1 per cent. This figure, though still high by the standards of more industrialised countries, was unprecedentedly low for Soviet times: the lowest previous figure was 89.1 per cent in 1925.¹⁸⁷ There were great differences between industries. Turnover declined particularly rapidly in MBMW, where it had always been relatively low, and in the food industries, where it had always been relatively high owing to the high percentage of seasonal labour. It increased slightly in the coal and iron and steel industries, which were under most pressure to increase productivity. In building, where employment was largely seasonal, turnover had always been high. In 1931 it reached a peak of 306 per cent (see vol. 4, p. 543). In 1934 it declined sharply to 225.3 per cent, and in 1935 it increased slightly to 235.1 per cent. Departures in the building industry reached a peak in January of each year (24.5 per cent in January 1935), and were lowest in the summer months, but even in August 1935 they still amounted to 16.9 per cent.¹⁸⁸

On the railways a trained labour force had already been firmly established before the war, and turnover was relatively low. In 1935 it increased from 45.6 to 48.1 per cent, no doubt as a result of the extreme pressure on the work force to achieve better performance.¹⁸⁹

¹⁸⁵ For employment by industry, see *Trud* (1936), 92. These figures are for January 1 of each year while those on employment by major sector are for average annual employment.

¹⁸⁶ RGAE, 1562/10/468, 12 (n.d. [1937]).

¹⁸⁷ *Trud* (1936), 95. These figures include all departures, including 'reduction in the labour force', enlistment in the armed forces, quitting for further training, dismissals for indiscipline (including absenteeism) and (the most substantial item) resigning at one's own wish.

¹⁸⁸ *Trud* (1936), 249.

¹⁸⁹ *Trud* (1936), 284.

While the number employed in industry increased by 8.2 per cent, labour productivity increased by 13 per cent as compared with 11 per cent in 1934. Thus some two-thirds of the increase in output can be attributed to the growth in productivity. The most rapid increase was in Narkomtyazhprom (19.1 per cent). The only major Narkomtyazhprom industries in which the increase was less than 15 per cent were oil extraction (0.9 per cent) and oil refining (1.3 per cent).¹⁹⁰ The increase was also small in Narkomlegprom (2.8 per cent), where the cotton shortage had reduced production in the first nine months of 1935.

The greater increase in productivity than in 1934 was entirely due to exceptionally rapid progress in October–December, after the launching of the Stakhanov movement. In this quarter productivity normally increased more rapidly than in the previous nine months, owing to the effort to achieve the annual plan by the end of the year. But in 1935 the increase was exceptionally high in all the Narkomtyazhprom industries for which comparable data have been available. In Narkomtyazhprom as a whole, the increase was 13.4 per cent as compared with July–September 1935, and 9.8 per cent as compared with October–December 1934. The increase in productivity was particularly large in the coal industry, the birthplace of the Stakhanov movement: in October–December 1934 productivity in the industry had hardly increased at all.¹⁹¹

Technical improvements played an important part in the increase in productivity, reflected in the increase in electric power per worker by 14.6 per cent in 1935.¹⁹² The growth in productivity was also sustained by the relentless propaganda and other pressure in every industry to produce more per shift, intensified by the Stakhanov movement. In official reports, great emphasis was also placed on the results of the reform in the wage system. According to Gosplan, in the course of 1935 progressive piece rates were widely introduced in a considerable number of industries, and in agriculture, building and transport, sharply increasing the personal material interest of employees in increasing labour productivity.¹⁹³ In the copper mines and refining factories of the Urals, progressive piece rates were

¹⁹⁰ *Tyazhelaya promyshlennost'* (1935), 183–4.

¹⁹¹ Davies and Khlevnyuk (2002), 892–3.

¹⁹² *Narodno-khozyaistvennyi plan 1936* (1936), 283.

¹⁹³ RGAE, 4372/34/580, 16 (report of the labour department on the results of 1935, n.d. [1936?]).

introduced in the spring of 1934 for workers, and in a modified form for engineers and technicians, following the report of a central committee brigade headed by Pyatakov. According to Gosplan, the large increase in productivity which resulted led to the introduction of the system in further branches of the non-ferrous metals industry by an order of June 1, 1935. The payment of engineers and technicians by results was also introduced, via piece rates, progressive piece rates and bonuses, following the example of the experiment in the Makeevka works.¹⁹⁴

This is not the whole story. In the coal industry, the percentage of workers paid by progressive piece rates did not increase in the course of 1935, but it was only in October–December that the very rapid growth of labour productivity occurred.¹⁹⁵ An important factor encouraging increased productivity during the first wave of Stakhanovism was undoubtedly the decision not to increase output norms (see pp. 180–1 above), which meant that very large sums could be earned for production in excess of the norm.

(I) COSTS AND PRICES

The reduction of costs had always formed part of the official economic programme. With the continuous increase in investment, cost reduction was necessary for financial stability. Without cost reduction either retail prices would have to be increased, or goods would become more scarce. The drive for financial stability began in 1933, and cost reduction was taken much more seriously. In 1935 the assessment of cost reduction in real terms was complicated by the large increase in the prices of agricultural raw materials, and in wages, consequent upon the abolition of bread rationing. These changes meant that costs would inevitably increase substantially, particularly in the food and light industries. In both the January–March and April–June quarters of 1935 costs were planned in most cases to increase even more rapidly than in the year as a whole, but in three of the four

¹⁹⁴ RGAE, 4372/34/580, 12–13.

¹⁹⁵ The percentage of coal miners paid by progressive piece rates was 32.1 in March, 32.0 in June, 31.8 in September and 32.7 per cent in December (*Tyazhelaya promyshlennost'* (1935), 234).

industrial commissariats they were planned to decline in the second and third quarters as a result of improvement in comparative costs.¹⁹⁶

No systematic data on cost reduction were included in the confidential Gosplan reports for the first months of the year. In view of the importance now attached to costs, in August Molotov requested TsUNKhU to report on the situation, and Kraval', its new director, replied with an informative 13-page memorandum on the results of the first six months. The memorandum made a valiant attempt to sort out what it described as 'two factors operating in different directions: on the one hand the substantial increase in output per worker, on the other hand the very considerable increase in the prices of some kinds of raw material and fuel, and the increase in wages'.¹⁹⁷ Costs in industry as a whole in January–June were 20.9 per cent higher than the average annual costs in 1934.

Kraval' did not attempt to estimate a cost figure for industry as a whole from which price changes had been eliminated. In the relatively simple case of heavy industry, where changes in input prices played a minor role, costs had increased by 2.4 per cent (this was less than planned), but if price and wage increases were eliminated, they had fallen by 4.8 per cent.¹⁹⁸ Kraval' showed that the iron and steel industry was again the hero of the hour: here costs had declined in both old and new works, owing both to the more intensive use of plant and the more efficient use of fuel and ore.¹⁹⁹

¹⁹⁶ Planned cost increases in 1935 as compared with average annual costs in 1934 (per cent):

	<i>Narkomtyazhprom</i>	<i>Narkomlegprom</i>	<i>Narkompishcheprom</i>	<i>Narkomles</i>
Whole year ^a	3.0	51.6	53.1	13.0
January–March ^a	5.5	52.3	83.0	10.0
April–June ^b	3.0	53.6	58.5	12.0
July–September ^c	2.0	54.0	42.0	9.5

^a GARF, 5446/1/95, 122–134 (art. 64, dated January 11).

^b GARF, 5446/1/99, 342–343 (art. 514, dated March 26).

^c GARF, 5446/1/103 (art. 1267, dated June 22).

¹⁹⁷ GARF, 5446/82/39, 168–156, dated September 14. The memorandum was heavily marked throughout by Molotov.

¹⁹⁸ Narkomtyazhprom later reported that in January–March costs had risen by 5.1 per cent and in April–June by 1.2 per cent, in each case an improvement on the plan.

¹⁹⁹ Narkomtyazhprom later reported that in January–March costs had risen by 1 per cent and in April–June they had fallen by 1.2 per cent, in each case an improvement on the plan (*Tyazhelaya promyshlennost' 1935* (1936).

As usual, costs were affected unfavourably by unplanned increases in wages. In 1935 the total wage bill, planned to increase from 44,009 to 49,825 million rubles, in fact reached 56,200 million, 12.8 per cent greater than planned.²⁰⁰ This was partly due to a small above-plan increase in the number employed, but mainly a result of the increase of the average wage from 1,853 rubles in 1934 to 2,272 rubles (+22.6 per cent) instead of the 2,046 rubles planned.²⁰¹

This unplanned increase in money wages was partly compensated by the above-plan increase in productivity. Overall, however, the average industrial wage, including the bread supplement, increased by 26.2 per cent, while productivity increased by only 12–13 per cent.²⁰²

In construction the number employed declined much more than planned (see p. 238 above), but the average wage, instead of declining by the planned 3.8 per cent, increased by 21.1 per cent. In consequence the wage bill did not decline as planned, but increased by 3.5 per cent.²⁰³

In spite of the unplanned rise in wages, the costs operation in industry was quite successful. According to TsUNKhU estimates, cost increases in industry corresponded quite closely to the plan (per cent):

	<i>Planned increase</i>	<i>Actual increase</i>
Narkomtyazhprom	3.0	0.0–0.4
Narkomlegprom	51.6	55.0–64.6
Narkompishcheprom	53.1	50
Narkomles	13.0	12.0–14.0
All all-Union industry	21.4	18.0

Sources: For plan, see p. 241, n. 196 above. For actual, see *Osnovnye pokazateli*, March 1936, 103.

Note: the lower actual figure is commercial cost, the higher factory cost.

The increase in the delivery prices for agricultural raw materials was more important in increasing costs than the bread supplement, even

²⁰⁰ *Narodno-khozyaistvennyi plan 1936* (1936), 458–9. These figures refer to the whole employed labour force, including wage earnings in sovkhozy and other agricultural occupations, which are excluded from Table 18.

²⁰¹ For the plan see *Narodno-khozyaistvennyi plan 1935* (1935), 641.

²⁰² RGAE, 4372/34/580, 21. If the wage supplement is excluded, the average wage rose by only 13 per cent, equal to the rise in productivity.

²⁰³ *Narodno-khozyaistvennyi plan 1935* (1935), 642–3 (for the plan); *Narodno-khozyaistvennyi plan 1936* (1936), 458–9. In these calculations, we have compared the average wage in 1935 with the actual average wage in 1934, not with the significantly lower wage anticipated when the 1935 plan was compiled.

in Narkomtyazhprom, where the cost of agricultural raw materials was less significant.

In construction the planned reduction in costs by 15 per cent was not achieved. In the uncertain world of the measurement of building costs, estimates varied considerably. At the builders' conference in December 1935, Mezhlauk stated that they fell by 1–1.25 per cent.²⁰⁴ The report on the results of the 1935 budget gave 'a maximum of 3 per cent'.²⁰⁵ Later calculations by TsUNKhU even more optimistically gave the reduction as 4.2 per cent.²⁰⁶ The two main components of building costs were building materials and labour: TsUNKhU claimed that the cost of the former had increased by 3 per cent, while the cost of labour had declined by seven per cent, because productivity had risen by 31.1 per cent while the average wage increased by only 22.1 per cent. Although these calculations were very rough, they indicate that the rise in building costs, continuous since 1930, had for the time being been halted and perhaps reversed.

During the last quarter of 1935 a small cloud had gathered. To encourage the Stakhanov movement, norms were not increased (see pp. 180–1 above), and, with progressive piece rates playing an increasing role, overfulfilment of the plan led to a disproportionate increase in wage costs. Gosplan explained the contradictory trends:

Although the rate of increase of the wages of *progressivniki* [those paid by progressive piece rates] ... exceeds the rate of growth of their output, nevertheless some savings are achieved in the wages paid to auxiliary workers, and even more savings in overheads per unit of production. For the most part the savings exceed the additional expenditure on the wages of *progressivniki*.²⁰⁷

The evidence belied this optimism. While the old norms remained in force, wage costs tended to rise more than productivity. In Narkomtyazhprom, production costs in general declined in the second and third quarters, partly owing to the improved wage–productivity ratio, partly owing to economies in the use of fuel and materials, and to the improved use of capital. In the fourth quarter,

²⁰⁴ *Soveshchanie* (1936), 11.

²⁰⁵ *Otchet ... 1935* (1937), 155.

²⁰⁶ RGAE, 1562/10/357, 2–4 (n.d. [1937]).

²⁰⁷ RGAE, 4372/34/580, 22.

Percentage change in factory cost in main branches of heavy industry, 1935*
(1934 average = 100)

	<i>January– March</i>	<i>April– June</i>	<i>July– September</i>	<i>October– December</i>	<i>All 1935</i>	<i>1935 excluding price changes and bread addition</i>
All Narkomtyazh-prom	+5.1	+1.2	–2.2	–1.8	+0.4	–7.4
Power (Glavenergo)	–2.2	–1.4	–0.5	–7.3	–3.1	–5.9
Coal	+14.5	+9.9	+8.3	+11.4	+11.0	–0.6
Oil extraction	+21.1	+19.3	+22.5	+21.1	+21.0	+16.8
Oil processing		–0.7	–1.2	+0.4	–0.5	–2.2
Iron and steel	+0.6	–0.7	–13.4	–14.0	–8.7	–12.0
Iron ore	+12.2	–0.6	–13.4	–14.0	–8.7	–7.3
Coke (including coking chemistry)	+1.2	–3.6	–7.1	–0.7	–2.5	–4.7
Non-ferrous metal mining (Glavtsvetmet)	+3.1	–1.4	–0.9	+1.9	+0.6	–3.1
Non-ferrous metal processing (Glavtsvetmetotrabotka)	+8.9	+5.9	+4.0	+2.8	+5.1	–3.9
Aluminium	–3.6	–3.4	–16.1	–16.7	–10.5	–12.8
Machine building and metalworking	–2.1	–5.3	–8.3	–10.1	–6.7	–11.3
Chemicals	+15.8	+9.8	+6.1	+9.6	+10.2	–6.0
Cement (Soyuztsement)	+8.3	–5.2	–8.4	–0.5	–2.6	–6.9

* *Source: Tyazhelaya promyshlennost' 1935* (1936), 270–2. The original table includes data for nine other branches of heavy industry, and for sub-branches.

costs again increased. The increase was particularly pronounced in the coal-mining, iron ore, coke, chemical and cement industries. In coal mining, where the Stakhanov movement was most advanced and progressive piece rates were more prevalent, costs rose in 10 of the 11 mining trusts in the Donbass, though they continued to decline in the Kuzbass. In the iron and steel industry, the rapid fall in costs which had resulted from the efficiency campaign virtually ceased. Costs rose in all branches of the industry except that responsible for special steels. The pattern varied from factory to factory. Costs increased in 13 of the largest works, and continued to decline in 14.²⁰⁸ The increase in costs in Narkomtyazhprom was, however, less than that proposed in the quarterly plan.²⁰⁹

(J) THE STATE BUDGET

The price changes and cost increases profoundly affected the structure of the state budget. The large increase in the retail price of bread, with delivery prices paid to agriculture remaining largely unchanged, had the result that the tax on grain yielded 20,729 million rubles, as compared with 8,129 million in 1934, and amounted to 39.7 instead of 21.6 per cent of all revenue.²¹⁰ The yield of the traditional taxes on alcohol, oil and tobacco, 30.3 per cent of revenue in 1934, increased slightly in absolute terms, but their share of the budget declined to 23.3 per cent. The tax on grain, now the main source of revenue, yielded less than the 24,000 million rubles planned at the beginning of the year, partly because the price of bread was reduced on October 1, and partly because the sale of bread and flour was somewhat less than anticipated. The gap was covered by the additional tax on other food products as a result of the abolition of all food rationing on the same date.²¹¹

The total increase in budgetary revenue in 1935 amounted to 17,678 million rubles, 35.8 per cent. As much as 71.2 per cent of this was obtained by the tax on grain, and nearly all the remainder from

²⁰⁸ *Tyazhelaya promyshlennost' 1935* (1936).

²⁰⁹ The quarterly plan stated that costs in Narkomtyazhprom were to be one per cent less in October–December 1935 than in 1934 (GARF, 5446/1/171, 242, 286 – art. 2170, dated September 26). In fact the reduction was 1.8 per cent.

²¹⁰ The tax in 1934 consisted of 4,574 million rubles turnover tax and 3,555 million from commercial trade (see *Otchet ... 1934* (1935), 161).

²¹¹ See Khlevnyuk and Davies (1999), 591, 600.

tax increases on other foods, especially sugar, fats and meat, and also on tobacco.²¹²

While the increase in revenue was fairly straightforward, the equal increase in budget expenditure was more complicated. It consisted partly of a nominal increase due to the bread supplement, and the rise in the delivery prices for agricultural raw materials. But it was also due to an increase in the wages of additional manual and office workers employed by budget-financed institutions, and in the other additional resources allocated to budget institutions. With the data available, it is impossible to estimate accurately the division between nominal and real increases in expenditure, but it obviously varied between different sectors of the economy:

Percentage increase in budget expenditure, 1934–35, by sector of the economy¹

National economy	26.2
of which:	
Industry	18.6
Transport and communications	46.9
Social and cultural	53.3
Allocation to local budgets	77.2
Defence	63.1
NKVD	55.2
Total	40.6

¹ *Otchet ... 1935* (1937), 133.

The most important item, expenditure on the national economy, increased less rapidly than the rest of the budget, primarily because a larger part of its expenditure was in unchanged prices. Unlike the retail price of food, the transfer and wholesale prices which industry received for its production were not changed. Nevertheless, the large subsidies to coal, iron and steel, and other basic industrial products increased with the rise in production. Separate figures for subsidies are not available; they form part of ‘financing of working capital’ and ‘operational expenditures’.²¹³ Allocations to heavy industry for

²¹² For details, see *Otchet ... 1935* (1937), 162–3. The tax on vodka and on light industry declined, but these other increases covered the loss.

²¹³ In June 1935, Gosplan estimated that the total gap between the transfer prices and cost for the whole economy was ‘about 5,000 million rubles’, 2,000–2,500 of which it attributed to industry. Subsidies on coal, peat, coke and ore were estimated

these two purposes increased from 4,762 to 6,648 million rubles in 1935. In spite of the efforts of the iron and steel industry to renounce subsidies, the allocation for working capital to Glavmetall, the largest single item, amounted to 1,584 million rubles, and the allocation to coal was 1,136 million.²¹⁴

Capital investment, the other major sub-item under the heading 'National economy' did not increase in 1935. This was partly because investment in real terms increased much less than planned (building costs declined far less than planned), and partly because a higher proportion of investment was financed by non-budgetary sources.

The increase in expenditure on Narkomoborony, like that on the national economy, was partly a real increase in expenditure on armaments, and partly due to the increased pay of servicemen, and the increased costs of the food and other goods purchased by the armed forces.²¹⁵

By far the largest part of the expenditure on education, health and other social and cultural services, and of the allocation to local budgets, consisted of wages, and of stipends to students. The increase was partly due to the bread supplement, but the wages of medical personnel were also increased by the decree of March 4, 1935. According to the report on the 1935 budget, the allocation to local budgets, planned at 8,977 million rubles, included 704 million for the bread supplement and 260 million for the increased wages of medical staff. But the most important factor in the increased expenditure was the increase in the number of personnel in social and cultural services.

Although the state budget was nominally in surplus, as usual the credits advanced by the banks increased without appearing in the budget. As a result, the amount of currency in circulation, planned to remain stable in 1935, rose by 25.5 per cent, from 7,734 to 9,710 million rubles. This was a reflection of increased economic activity and of the price changes consequent upon the abolition of food

at 1,222 million and subsidies to ferrous and non-ferrous metals at 534 million (RGAE, 4372/33/548, 2-4, dated June 17, 1935). When the price reform was undertaken, these proved to be considerable underestimates.

²¹⁴ *Otchet ... 1934* (1935), 74, *Otchet ... 1935* (1937), 58-9. A breakdown by industry is not available for 1934.

²¹⁵ In 1935 Narkomoborony was required to pay normal prices rather than subsidised prices for some of the inputs it purchased, such as oil.

rationing rather than due to the unnecessary surrender by the banks to the demands of economic organisations (see Mar'yasin's memorandum, pp. 131–2 above).

The abolition of rationing was achieved without a general currency reform, in contrast to the other two occasions when rationing was abolished: after the civil war (1922–24) and after the second world war (1946–47). This appears to be due to both objective and subjective factors. During the first five-year plan the inflation was not so great as in 1914–22 and 1941–47; and in 1934–35 the economy was in a much more healthy state. The contrast between these three occasions deserves further investigation.

(K) THE ATTEMPTS AT FINANCIAL REFORM

At the beginning of 1935 Mar'yasin sent a series of secret memoranda on the financial system to Stalin and Molotov, or to Molotov alone. In view of the failure of past attempts at general economic reform, by Birbraer and others, he indicated his general view about the changes needed in the system with caution, and expressed his proposals in terms of the needs of the financial system rather than a proposal to reform the economic system as a whole.²¹⁶

From the 1920s until the collapse of the Soviet system in 1991, grants classified as part of the budget were fairly firmly under central control, and short-term credit was the mechanism through which 'soft money' was made available to the economy. The Politburo attempted to curb short-term credit by imposing strict controls on currency issue. When successful, these controls limited the issue of credit; but in practice currency issues almost always exceeded the plan. Outstanding credit increased rapidly. Gregory and Tikhonov have shown that 'throughout the 1930s there would be bursts of rapid growth of arrears [failure of enterprises to pay their debts], followed by clearing operations to reduce their magnitude'.²¹⁷ Soon after Mar'yasin took over the bank, the Soviet control commission, in a memorandum to Stalin and Molotov, complained that 'huge debts of economic agencies are widespread in all branches of the economy'. The bank had proved

²¹⁶ For Birbraer's reforms, see vol. 4, pp. 225–8, 342–7, and SR, lxii (1984), 201–23 (Davies).

²¹⁷ *Journal of Economic History*, 60 (2000), 1032–3.

incapable of preventing these debts, and in particular it had failed to 'effectively use its right to penalise the offenders by selling-off their goods'.²¹⁸

Mar'yasin, in the first of his memoranda, dated January 2, 1935, blamed the existing payments system for the accumulation of bad debts. The rules were that the branch of the bank concerned provided credit to the supplying organisation for the goods it had despatched, but only for a period of 48 hours (plus the time taken for the transfer of the documents), after which the purchasing agency was required to accept the goods (or reject them, which rarely happened), and to pay for them, almost invariably before they had reached the purchaser. To enable the payment, another branch of the bank, located near the purchaser, issued credit to the purchaser. Mar'yasin complained:

The supplier may send broken glass, rusty razors, or suits with short sleeves – the accounts will be paid within 48 hours after the account is received.

Mar'yasin proposed that instead all credit issues should be handled by the bank which dealt with the wholesale supplier, and the credits should be advanced to the supplier, who would recoup them from the purchaser. Automatic payment after 48 hours would be replaced by fixing the date on which payment was due according to the type of good and the location of the supplier and purchaser. If the purchaser failed to pay on time, the bank would collect the payment compulsorily through the courts. The great advantage of this arrangement, according to Mar'yasin, was that the suppliers would themselves be materially interested in the ability of the purchaser to pay, and would therefore seek to supply marketable goods. At the same time the supplier would have 'some degree of choice between different purchasers', and could switch goods to the more prompt payers.²¹⁹

Three months later, on March 31, in a further memorandum to Molotov, he frankly described the arrangements he proposed as 'commercial credit' from supplier to purchaser, describing the provision of credit direct from the bank to the purchaser as 'the reverse side of the rationing of consumption'. The new system would encourage 'local trading initiative and local industry' as well as

²¹⁸ GARF, 5446/71/11, 70–67 (dated July 21, 1934, signed by Antipov and Sulkovskii).

²¹⁹ GARF, 5446/27/98, 32–21.

compelling suppliers to be concerned that their goods were marketable. An accompanying draft decree stated that the wholesale suppliers would charge 4 per cent interest on the credit they supplied to the purchaser, and even described this credit as a *veksel*, the traditional word for 'promissory note' or 'bill of exchange', used in the 1920s and in tsarist Russia – but it added that the proposed *veksel* could not be transferred to a third party. Purchasing organisations which did not pay on time would be declared 'insolvent' (*neplatezhesposobnyi*).²²⁰

On the basis of these proposals about the credit system, Mar'yasin also advocated far-reaching changes in the budgetary system. In a further memorandum he made a general criticism of the turnover tax (this was really a sales or purchase tax varying by the type of product, disguised as a tax on turnover). He pointed out that the tax, which in 1935 was planned to amount to as much as 80 per cent of budgetary revenue, in fact consisted of an amalgam of various types of tax, including not only a tax on turnover, but also excises and deductions from profits. The reform establishing the turnover tax in September 1930 had been publicly lauded as the crowning glory of the planned financial system, but Mar'yasin now castigated it as 'harmful'. It deprived enterprises of a profit incentive: some industries paid thousands of millions to the budget and then received tens of millions in subsidies. The tax made prices less flexible, because of the risk that price changes (brought about through changes in the rate of turnover tax) would reduce budgetary revenue. Mar'yasin therefore proposed that excises should be introduced for tobacco, vodka, kerosene, matches, sugar, salt, galoshes and bread. Except for bread, this collection of goods corresponded to those bearing excises before the revolution and / or in the 1920s (the tax on textiles did not exist before the war). He proposed that the tax on bread (which now provided far more revenue than any other good) should be 'temporary'.²²¹

Mar'yasin's provocative proposal to revive major features of the tax system of the 1920s was not taken further. According to the report of an eye-witness, at a meeting of the Economic Officials' Club (formerly the Red Directors' Club) Grin'ko, the People's Commissar for Finance, acknowledged the political reason for rejecting it:

if turnover tax is imposed at the retail stage, this means all the sales people and staff in retail trade will know the amount of tax, and will

²²⁰ GARE, 5446/71/11, 25–18.

²²¹ GARE, 5446/26/66/ 474–370 (no date [March? 1935]).

provide enemy social groups (*elementy*) with a weapon against us. These enemy groups will begin to say that 'we are trading in taxes and not goods'.²²²

Mar'yasin's proposals to introduce commercial credit and *vekseli* were also dropped. A Soviet handbook on trade, published two years after Mar'yasin had been dismissed and executed, excoriated the 'Trotskyite bandits in the leadership of the State Bank who demanded the restoration of commercial credit' and stated that 'the party and government decisively rebuffed this infamous proposal'.²²³ But Mar'yasin's less radical proposals were embodied in a major Sovnarkom decree 'On Changing the System of Crediting Trade Turnover', promulgated on June 4, 1936. This decree also strengthened the right of the bank to prevent purchasers who defaulted on payments from selling their goods, and if necessary to remove credit facilities from them altogether.²²⁴

Grin'ko, as befitted his office, took a more conservative approach to reform than Mar'yasin.²²⁵ But the need for additional budgetary revenue led him to make quite radical proposals. For good or ill, he

²²² RGASPI, 56/1/771, 142–147 (report by a financial supervisor from the party control commission). This remark was followed by 'unhealthy laughter'. The meeting, held on November 13, 1935, was attended by several hundred managers, accountants and lawyers, both party members and non-members. The British war-time purchase tax was similarly included in the price without the retailer stating the amount. Alexander Baykov claimed that it was modelled on the Soviet turnover tax (personal communication).

Surprisingly, in spite of this condemnation of commercial credit, the debate resumed in 1940–41. Zverev, appointed People's Commissar for Finance from January 1938, reports in his autobiography that towards the end of 1940 the State Bank, now headed by Bulganin, proposed to Sovnarkom that the credit system should be thoroughly revised, and that in particular commercial credit and the *veksel'* should be introduced. The reform was strongly opposed by Narkomfin, but the discussion 'occupied the leading state agencies for many months'. Eventually, at the beginning of 1941 the proposals were brought to a sitting of the bureau of Sovnarkom attended by Stalin. He strongly criticised the proposals: 'he was particularly surprised by the proposal to introduce credit *vekseli* ... Won't we soon get to the point that someone will want to establish a stock exchange?' The proposal was forthwith dropped. Zverev (1973), 181–6. A proposal that trade turnover should be financed by bank credit, though opposed by Zverev, was carried by a majority.

²²³ Lifits and Rubinshtein, eds (1939), 566 (sent to press December 9, 1939).

²²⁴ SZ, 1936, art. 278.

²²⁵ In 1935 Narkomfin and the State Bank (which was nominally subordinate to Narkomfin) engaged in a bitter battle about demarcation rights, and both Grin'ko and Mar'yasin sought Stalin's support. At the same time, on a number of occasions

strongly criticised the substantial subsidies received by the industrial commissariats to keep down the rents of housing under their control.²²⁶ Together with Mar'yasin, he put continuous pressure on industry to increase the supply of food and industrial consumer goods, so as to increase tax revenue and reduce consumer demand.²²⁷ For the same reason, Grin'ko also called for a substantial increase in activities classified as 'non-commodity operations', specifically listing taxi services, dry cleaning, laundries, hairdressers, baths and hotels:

All these are in short supply, and by expanding them we could both satisfy the requirements of the population and receive large additional revenues.²²⁸

(L) THE ADVANCE OF AGRICULTURE

(i) *The continued spread of collectivisation*

Throughout 1935, as in previous years, the authorities sought to increase the number of households collectivised by applying pressure to the remaining individual peasants to join the kolkhozy. Some peasant households, categorised as 'kulaks and anti-Soviet element' were exiled, in January–June 1935 some 13,000 households.²²⁹ But the measures affecting individual peasants as a whole were more important. The amount of grain to be delivered by individual peasant households was increased.²³⁰ The annual agricultural tax was imposed on them with considerable ferocity. As chairman of TsIK, Kalinin was sent a huge number of complaints about the excessive amounts of tax, reaching 200–300 complaints a day, far more than previously, and 20–40 petitioners a day arrived at Kalinin's office, often carrying with them 20–30 complaints from other peasants, or complaints from all the individual peasants of their settlement. The tax imposed in the

they joined together on a number of matters of common interest. Theirs might be described as a Blair–Brown relationship.

²²⁶ RGASPI, 82/2/771, 1–6 (dated July 25, 1934).

²²⁷ See, for example, their joint memorandum dated May 29, 1936 (RGASPI, 82/2/772, 21–27).

²²⁸ RGASPI, 82/2/772, 46–55 (dated July 17, 1936).

²²⁹ TSD, iv (2002), 550–1 (NKVD memorandum dated July 15, 1935).

²³⁰ SZ, 1935, art. 91 (March 3, 1935); Tsd, iv (2002), 476–7 (Kleiner to Stalin and Molotov, dated April 25, 1935).

cases cited was so enormous that a peasant household could not possibly pay it.²³¹ In 1935 as a whole, the percentage of collectivised households increased from 81.7 to 87.7 per cent (see Table 28).

As in previous years, during this process, some individual peasants were moving into kolkhozy, and others were taking up urban occupations, while simultaneously some collective farmers (usually male) were moving to the towns seasonally or permanently. These movements were of course primarily but not entirely taking place in the industrial areas, particularly Leningrad and the Central Industrial regions such as Ivanovo. This resulted in some striking anomalies. The kolkhozy from which collective farmers moved to the towns resented the loss of their labour, especially when the peasants moved spontaneously rather than as part of an agreement between the kolkhoz and an urban organisation. Contrary to the legal provisions, the chair of the kolkhoz often expelled them from the kolkhoz and refused to let their families remain as members. These decisions were resisted by the authorities. At the non-Black Earth conference in December 1935 (see pp. 257–8 below), Zhdanov insisted:

Expulsion from the kolkhozy involves a considerable number of collective farmers, including those moving as a result of *otkhodnichestvo* [seasonal work in the towns]. It is clear from the reports and communications made here that a very large percentage of those leaving the kolkhozy are moving to the towns and industry. The families of those going to the towns to work are expelled, and this is absolutely wrong, because the districts of the non-Black Earth zone are now and undoubtedly in the future will continue to supply the labour force for our industry. To close the way out for collective farmers who want to go to this work, as many of our kolkhoz chairmen and local officials are doing, is a most reactionary measure. It must not be forgotten that our industrial centres and most of our Soviet enterprises received their labour because it left the countryside.²³²

(ii) *The rapid growth of agriculture*

In 1934, as we have seen (see pp. 82–3 above), the harvest was lower than in 1933. Nevertheless, some 3 million tons more grain were

²³¹ TSD, iv (2002), 560–5 (report dated August 7, 1935, from P. Savel'ev, deputy head of the secretariat of VTsIK of the RSFSR, to Kalinin).

²³² TSD, iv (2002), 660 (dated December 7, 1935).

collected in grain deliveries and *zakupki* than in the previous year. This placed a further considerable strain on the state's relation with the peasants. But, coupled with the substantial reduction in grain exports by about 1.5 million tons, the increased grain provided the state with the cushion it needed to safely handle the abolition of bread rationing, and it also enabled an additional 3.4 million tons to be set aside at the end of the agricultural year as state stocks. This meant that total state stocks on July 1, 1935, amounted to 6.38 million tons, as compared with 1.997 million tons two years previously. The economy was well on the way to achieving the substantial reserves of grain which Stalin had been vainly seeking since 1929.

Following this success in handling the 1934 harvest, 1935 was perhaps the most successful year in the development of agriculture in the 1930s. Both the sowings and harvesting of grain were carried out timely and efficiently (see p. 156 above). When on December 15, 1935, Bryukhanov reported realistically to Stalin and Molotov on the results of the 1934 harvest (see p. 93 above), he was also able to make an estimate along similar lines of the 1935 harvest, which had of course by this time been completely harvested. Bryukhanov pointed out that various estimates had been made of the grain yield. Osinsky's harvest evaluation committee TsGK, of which Bryukhanov was deputy head, had estimated the 'normal economic yield', the yield on the root minus technically-unavoidable losses, at 8.4 tsentners per hectare, Kleiner's committee for grain collections Komzag gave 8.6 tsentners. Chernov, People's Commissar for Agriculture, stated as recently as December 3 that the yield had reached as much as 9 tsentners, arguing that the mass threshings had shown that TsGK had considerably underestimated the yield.²³³ Bryukhanov claimed that Chernov had not made it clear whether his figure was for the yield on the root or for the 'normal-economic yield'. Pointing out that Kleiner and Osinsky had both given figures for the normal economic yield, Bryukhanov rather boldly argued that this yield was unrealistic and should be abandoned: only the yield on the root and the actual gross harvest should be estimated. According to Bryukhanov, the yield on the root was 9.1 tsentners, giving a harvest of 94 million tons, but the actual yield was only 7.7 tsentners, giving a harvest of 80 million tons as compared with 76.5 million tons in 1934.

Yakovlev, in charge of agriculture in the central committee, had already rejected this estimate as 'a crude distortion of the facts' and 'a

²³³ For Chernov's report sent to the central committee and Sovnarkom, see TSD, iv (2002), 638–9.

slander on the USSR', and Stalin, addressing a conference of combine-harvester operators on December 1, had already stated that the harvest would be 'more than 5½ million puds (90 million tons)'.²³⁴ On December 16, the day after Bryukhanov submitted his memorandum to Stalin and Molotov, the Politburo condemned the method used by the TsGK as 'incorrect and unscientific, arbitrarily reducing the yield per hectare and the figure for the gross harvest'. The yield used for calculating the harvest should be 'the actual yield per hectare taking into account losses in the economy and expenditure in the fields'.²³⁵ At first the harvest was estimated officially at the very high figure of 94.6 million tons.²³⁶ But in May 1936 the Politburo reduced the estimate of the yield in 1935 to 8.7 tsentners and the 1935 gross harvest was stated to have been just over 90 million tons when the plans for 1937 were drawn up.²³⁷ In the grain-fodder balance this figure was made compatible with reality by the usual practice of including a 'disjuncture'. This time it was 10.9 million tons, reducing the total harvest to 79 million tons, roughly the figure proposed by Bryukhanov in December 1935. Thus both the official figures and the more accurate figures proposed by Bryukhanov agreed that the 1935 harvest was very substantial. It was somewhat greater than the previous record harvest of 1930, which we have estimated at approximately 77 million tons.

Nearly all the other sectors of agriculture were equally successful. The number of livestock increased particularly rapidly. Between January 1, 1935, and January 1, 1936, the number of cattle increased by 18 per cent, of sheep by 20 per cent, and of pigs by as much as 51 per cent. The number of horses had declined in every year since 1929, but in 1936 the number increased by 4 per cent, though there were still only half as many as in 1929. The number of both socialised and non-socialised animals increased; considerably more than half of all animals were owned by collective farmers and individual peasants. Only in the case of horses did ownership by individual peasants decline, from 20 to 12 per cent of the total, owing to the collectivisation during 1935 of a substantial number of individual peasants (see Table 28).

On August 31, 1935, Kaganovich reported to Stalin the conclusions of the Politburo meeting held on the same day, which dealt with the progress of the main industrial crops.²³⁸ In a detailed discussion

²³⁴ Stalin, *Soch.*, xiv (1997), 93–9.

²³⁵ RGASPI, 17/3/973, 2.

²³⁶ RGAE, 4372/34/417^a, 52–64.

²³⁷ RGASPI, 17/3/977 (April 29, 1936); RGAE, 4372/35/467, 85–86.

²³⁸ SKP, 543–4.

about the sugar-beet harvest, at which Kosior from Ukraine had been present, 'everyone agreed that the yield is 25–30 per cent higher than last year, i.e. approximately 120–125 tsentners per hectare':

Everything depends on the quality of the harvest. The prospects now are unprecedented, because the grain collections in Ukraine will be completed by September 5, so that labour and transport will be freed [for the sugar-beet harvest].

Kaganovich also reported that the situation with cotton was 'not bad'. Reports from Uzbekistan indicated a yield of 10.5 tsentners as compared with 8.2 tsentners in the previous year, though yields in the new cotton areas of Ukraine and North Caucasus were only 5–6 tsentners. A few days later, on September 5, Molotov and Kaganovich reported to Stalin with a detailed regional breakdown that the cotton collections were planned at 1.515 million tons, 29 per cent greater than the 1.176 million tons collected in 1934 – in terms of cotton fibre this was 30.058 million puds (492,000 tons).²³⁹

In the upshot, when the harvest was completed, 1935 saw a substantial increase in the production of major food and industrial crops: sugar beet by 42 per cent, potatoes by 24 per cent, cotton by 42 per cent. In each case this expansion was due to the rise in yield rather than sown area. However, the production of flax increased only slightly, and the production of sunflower seed and vegetables declined (see Table 30). According to official statistics, gross agricultural production increased by 12.3 per cent in 1935, more rapidly than in any other year in the 1930s except 1937.

The good grain harvest of 1935 provided the state with the opportunity to increase the collections. This was not achieved without difficulty. The good harvest was not universal. On August 16 Kaganovich had reported to Stalin, who by this time was already on leave, that the harvest in some Odessa districts was poor; and that the regional party secretary had asked for a reduction in their grain collections by 12 million puds (197,000 tons), and requested a small seed loan for the autumn sowings. Three days later Stalin replied with unusual amiability 'I consider the proposals to be minimal; I propose they should be accepted.'²⁴⁰ On August 21 a similar proposal from Khataevich for the Dnepropetrovsk region was accepted by Stalin on

²³⁹ SKP, 553.

²⁴⁰ SKP, 523–4, 527.

the following day.²⁴¹ But he was not always so ready to agree to local proposals. On August 22 Kaganovich and Molotov reported to Stalin that the Ukrainians were asking for the right to use the 6 million puds (98,000 tons) remaining in the reserve of their collections plan to offer relief to any Ukrainian kolkhozy which were in difficulties; Kaganovich and Molotov supported this proposal on the grounds that Ukraine had already completed 70 per cent of its annual collections plan (excluding the milling levy), but Stalin replied on the following day:

I propose to concede to the Ukrainians not completely but in part, i.e. to give them half of the reserve, and keep the other half for the state, on condition that they do not request any seed or other grain assistance. Tell the Ukrainians that with their record harvest it would be good to also have a conscience and not to turn themselves into beggars. I insist on my proposal.²⁴²

He added a few days later:

You must put pressure on the grain collections and for [the reduction of] loans. Particularly put pressure on the Ukrainians, who have been corrupted by our concessions, and on Omsk and other East[ern] regions. Send Kleiner to Omsk region and someone else to Bashkiria, and put on the pressure.²⁴³

Some other areas suffered from bad weather and a poor harvest. On October 11 Molotov and Kaganovich informed Stalin that they had been visited by Eikhe, who had reported that the dry hot winds in July had affected the whole south-west of the West Siberian region, involving kolkhozy which occupied 45 per cent of the sown area of the region, reducing the grain harvest by 1.26 million tons. He had asked for a reduction in their grain deliveries and the postponement of the repayment of their seed loans.²⁴⁴ A substantial part of the non-Black Earth regions was also affected by poor weather. At a conference in the central committee after the harvest, K. I. Nikolaeva, party secretary of the Ivanovo region, reported that in her region 'it

²⁴¹ SKP, 529.

²⁴² SKP, 529–30, 532.

²⁴³ SKP, 531. On August 28 Kaganovich reported to Stalin that his proposals had been carried out (SKP, 538–9).

²⁴⁴ TSD, iv (2002), 613. This telegram is not included in SKP.

was an extremely difficult year as compared with last year' – the weather was 'repulsive'. Summing up the conference, Zhdanov reported the 'low yield' of grain and flax in the non-Black Earth as a whole, but also attributed it to poor crop rotation, poor use of equipment and failure to apply the kolkhoz Statute properly.²⁴⁵

However, the harvest and the collections in the key grain areas were basically trouble-free. On September 5, the same day that Molotov and Kaganovich wrote to Stalin about the successful cotton crop, Kaganovich reported to him 'The grain collection business is going well for us. What we achieved with grain this year is really a great victory for the party – a victory for your line, cde. Stalin!'²⁴⁶ A month later Poskrebyshev informed Stalin that on October 15 total grain received in the USSR amounted to 23.9 million tons as compared with 19.7 million tons on October 15, 1934.²⁴⁷

In spite of, or perhaps because of, this success the authorities had already decided to resume the effort to obtain additional grain, as in 1934 (see pp. 67–8 above), by means of *zakupki* (purchases). Molotov and Kaganovich had already reported to Stalin on September 4 that Komzag had proposed to obtain 150 million puds (2.46 million tons) as compared with the 209 million (3.42 million tons) obtained from the 1934 harvest. Molotov and Kaganovich made the counter-proposal that the 1935 plan should be 200 million puds (3.28 million tons), with the cautious proviso that 'if there are difficulties in some regions this figure could be corrected during the *zakupki*'.²⁴⁸ Stalin replied on the same day firmly rejecting this caution, and linking his view with the need to build up substantial grain stocks:

The plan of grain *zakupki* which you propose is insufficient. In my opinion we need to purchase a minimum of 250–300 million puds (4.10–4.91 million tons). Bear in mind that we will not have a good harvest every year. We must have 400–500 million puds (6.6 – 8.2 million tons) of untouchable transitional stocks (*sic*), if we want to secure ourselves against a bad harvest or external complications. The present *nepfondy* (untouchable funds) will not do this, as they are current and not permanent stocks.²⁴⁹

²⁴⁵ TSD, iv (2002), 645, 660–1. The conference was held December 5–7, and was attended by Stalin and other leaders.

²⁴⁶ SKP, 554.

²⁴⁷ TSD, iv (2002), 615 (telegram dated October 18).

²⁴⁸ SKP, 548–9.

²⁴⁹ SKP, 549.

Stalin was evidently confused, as the stock of 6.38 million tons accumulated by July 1, 1935, certainly included 3 or 4 million tons not needed for current purposes. At all events, on September 5 the Politburo resolved that the *zakupki* plan should amount to 300 million puds, the higher of Stalin's figures,²⁵⁰ and a few days later the breakdown of this figure by region was agreed, and also that the first instalment of 75 million puds should be obtained in September.²⁵¹

It soon emerged that the high plan for *zakupki* had run into difficulties. On September 28 Stalin wrote to Kaganovich and Molotov: 'Since almost all regions are asking for the plan for grain *zakupki* to be reduced, the plan should be reduced to 240 million puds (3.93 million tons).'²⁵² A few days later on October 3 Kaganovich and Molotov, accepting Stalin's proposal to reduce the *zakupki* plan, sent him proposals for appropriate cuts to be made in the regional *zakupki* plans. They also proposed that the plan for October should be 100 million puds plus 45 million puds arrears from September, 145 million puds (2.38 million tons).²⁵³ Stalin replied on the same day with a more detailed comment on the problems of the *zakupki*:

From talks with workers on the spot (*praktiki*) I have learned that the *zakupki* of grain often do not take place after the distribution of incomes to collective farmers but before the distribution, leading to a reduction in the payments for labour days. Thus in a whole number of cases the amount received in kind for the labour days is reduced so this looks like (compulsory) grain deliveries. This makes the work of our organisations easier, but at the expense of harming the interests of our policy in the countryside... This negative consequence is one of the reasons why I recommended the reduction of the grain *zakupki* plan which I had proposed. It follows from this that the centre of gravity of the *zakupki* should be moved to the end of October, November and December, when the income has already been distributed to the collective farmers and every kolkhoz household will sell to the state more or less voluntarily the grain it possesses, as an act of trade rather than of compulsion. I therefore propose that the plan for October should be kept down to 100–120 million puds, including the arrears for September.²⁵⁴

²⁵⁰ RGASPI, 17/3/971, 16.

²⁵¹ SKP, 560–1 (Molotov and Kaganovich to Stalin) and Politburo decision RGASPI, 17/3/971, 25–6 (both dated September 10).

²⁵² SKP, 592.

²⁵³ SKP, 597–8.

²⁵⁴ SKP, 599.

The reduction in the planned *zakupki* was not very substantial, and a vigorous campaign to secure the *zakupki* continued during the next few months. On October 10, evidently ignorant of the correspondence between Stalin and his colleagues, Mironov, head of the economic department of the NKVD, sent a directive to the heads of the regional economic department of the NKVD which still assumed that the *zakupki* plan was 300 million puds, instructing them to handle the *zakupki* in the same way as the compulsory deliveries. The measures they took should include cleansing 'class-alien, hostile and criminal elements' from the department of Narkomtorg responsible for obtaining the *zakupki*, and preventing attempts to sell poor-quality grain to the state; they should report progress to the central economic department of NKVD three times a month. The reports should list guilty officials and state what punishments had been used against them. We do not know how far the strictness of the NKVD or Stalin's more moderate approach prevailed in practice. But eventually 218 million puds (3.6 million tons) were collected, an amount half-way between Kaganovich and Molotov's original proposal of 200 million puds and Stalin's reduced plan of 240 million, and far below the plan of 300 million puds at first approved by the Politburo and still included in the NKVD directive of October 10.

The leadership, strongly encouraged by Stalin, in these months discussed the grain problems in terms of the need to build up permanent grain stocks. On September 27, 1935, Kaganovich and Molotov had already reported to Stalin that 'today we discussed the grain fund', and presented to him the following figures (the original is given in puds):

According to Komzag the total amount of grain available in the period July 1, 1935, to June 30, 1936, is 35.2 million tons, consisting of
 6.6 million tons in hand on July 1, 1935;
 23.5 million tons grain collections from the 1935 harvest;
 4.9 million tons in the warehouses of Zagotzerno from *zakupki*.²⁵⁵
 Last year we had a total of 28.7 million tons,
 So in the current year we have roughly 6.6 million tons more.
 As part of the grain in hand on July 1 [1935] we had [special] funds amounting to 3.3 million tons.
 We think it is expedient to increase the funds to 8.2 million tons. If the amount of grain expended is 1.6 million tons more than last year,

²⁵⁵ This is the original higher plan of 300 million puds.

Zagotzerno will have an additional 3.3 million tons in hand for current needs,
Please inform us of your opinion.²⁵⁶

Stalin replied to this not very clear telegram on the following day, drawing attention to a further complication:

Your [telegram] 115 is not entirely comprehensible. We do not need grain in general for the grain fund but primarily food grain. It is not clear how much food grain is proposed for the grain fund. Also we do not need any kind of funds, but an absolutely untouchable grain fund, transferred unchanged from year to year with the grain renewed every year. You are referring to grain funds in general. These ambiguities must be eliminated so that there should not be confusion in future.

Stalin went on to point out that the *zakupki* were to be reduced to 3.9 million tons and that an additional amount must be set aside for export, with the consequence that 'I think we could restrict the absolutely untouchable grain fund this year to 350 million puds (5.7 million tons), on condition that three quarters of this should be food grains.'²⁵⁷

After some exchange of views, this led on October 7 to the approval by the Politburo of the 'Untouchable Grain-Fodder Fund' (the *Nepfond*), endorsed two days later by a decree of Sovnarkom.²⁵⁸ The Fund was to be formed and maintained by the Committee of Reserves, and used only with the permission of Sovnarkom. This Fund was to include the Mobfond and the Special Defence Fund in the Far East. In 1935/36 it was to amount to 350 million puds (5.7 million tons), including 265 million puds (4.34 million tons) of food grains [as Stalin had stipulated], 16 million puds (0.26 million tons) of groats and 69 million puds (1.13 million tons) of fodder grains. Komzag was to be responsible for supplying the grain to the Committee of Reserves annually, including arrangements for the renewal of the grain. The initial 350 million puds was to be made available by January 1, 1936. The decree specified the location of the grain: (i) 60 million puds to an area from Southern Ukraine to

²⁵⁶ SKP, 592.

²⁵⁷ SKP, 592–3.

²⁵⁸ RGASPI, 17/162/18, 173, 191–192 (art. 56); GARF, 5446/1/ 483, 97 (art. 2265/372ss).

Karelia; this [located in the western border regions] was the 'mobilisation part of the Fund'; (ii) 60 million puds to the Far Eastern, East Siberian and Krasnoyarsk regions. These precise location of these two stockpiles was to be determined by Narkomoborony. The remaining 230 million puds was to be located in the central regions: Moscow, Kalinin, Kursk, Voronezh, Khar'kov, Ivanovo, Saratov, Kuibyshev and Gor'kii. The grain 'towns (*gorodki*)' and milling combines in the East were to be transferred from Komzag to the Committee of Reserves. The larger grain stores previously managed by the Mobfond were to be transferred to the Committee of Reserves, and the remainder with a capacity of 500,000 puds or less were to be supervised by the Committee of Reserves but managed by Zagotzerno. By January 1, 1937, the NKVD was to construct grain *gorodki* with a capacity of 300 million puds (4.9 million tons). In addition to the 'absolutely untouchable Fund' of 350 million puds, the Committee of Reserves was to see that current food stocks amounting to a minimum of 30 million puds were to be established in the Leningrad, Sverdlovsk and Northern regions and in Central Asia and the Transcaucasus.

In the outcome, the total grain collected by the state from the 1935 harvest was the record amount of 29.599 million tons, of which 3.566 million tons was *zakupki*. This was 2.6 million tons greater than in 1934/35, and as much as 5.9 million tons greater than in 1933/34. The amount issued as seed and fodder loans was less than in either of the previous two years, but grain exports, severely restricted in 1934/35, amounted to 1.7 million tons. Nevertheless, this meant that a substantial amount of additional grain was available for the *Nepfond*. On July 1, 1936, total grain stocks amounted to a record 9.423 million tons, 3.0 million tons more than on July 1, 1935, sufficient to supply both the 350 million puds (5.7 million tons) of the October 1935 decree and a very large margin of 3.7 million tons for transitional stocks.²⁵⁹ These stocks, long striven for unsuccessfully, would soon save the USSR from another disastrous famine.

While behind the scenes considerable attention was devoted to deficiencies to be corrected, as at the non-Black Earth conference of December 5–7, publicly the year 1935 ended with displays of enthusiasm about the success of agriculture. A conference of

²⁵⁹ We have not had access to the materials of the Committee of Reserves which should show how much of the total stock of grain was allocated to the *Nepfond* itself on July 1, 1936.

combine-harvester operators opened on December 1 and was followed on December 4 by a conference of leading collective farmers of Tadzhikistan and Turkmenistan. Both conferences were addressed by Stalin.²⁶⁰ At the combine-harvester conference, he praised the rapid development of the production of combine harvesters and the successful training of the operators, and argued that the growth of the urban population, the increase in the number of producers of cotton and other industrial crops who could no longer grow their own grain, of the size of the population generally, and of the amount of grain fodder needed by livestock, all meant that the grain harvest should increase from the present 5,500 million puds (90 million tons) to 7,000–8,000 million puds (115–131 million tons) within three or four years, and that this could partly be obtained by the large reduction of losses which combine harvesters would make possible.

The combine-harvester conference also provided Stalin with an opportunity to announce a dramatic if temporary reconciliation between the regime and the descendants of the kulaks. According to the report in *Pravda*, at the conference A. G. Til'ba, a delegate from Bashkiria, explained that he was the son of a kulak who had been exiled in 1930. Til'ba had worked successively in a kolkhoz and in house-building, and since 1933 had been trained and worked as both a tractor and a combine-harvester driver. In 1935 he had proved to be the best combine-harvester driver in the USSR, and though his local organisation had not sent him to the conference Yakovlev had invited him:

Although I am the son of a kulak, I will honestly struggle for the cause of the workers and for the building of socialism. (*Applause.*)

Stalin intervened:

The son is not responsible for the father (*Syn za ottsa ne otvechaet*).

Til'ba then went up to the platform and shook hands with all the members of the conference presidium.²⁶¹

This incident was widely publicised in the press.

²⁶⁰ Stalin, *Soch.*, xiv (Moscow, 1997), 93–9, 100–1.

²⁶¹ P, December 4, 1935.

CHAPTER NINE

THE AMBITIOUS 1936 PLAN

(A) STALIN OVERRULES MOLOTOV: THE JULY 1935 DIRECTIVES

The discussions about the plan for 1936 were launched in July 1935, at a time when the successful results of the first six months of 1935 were already available. Gosplan and Narkomfin again advocated an extremely cautious investment plan. On July 19, 1935, Mezhlauk proposed that investment in 1936 should amount to only 17,700 million rubles, a reduction of 25 per cent as compared with the revised plan for 1935! In his memorandum to Stalin and Chubar' (who was responsible for Sovnarkom during Molotov's vacation) Mezhlauk stated that this level of investment would make it possible to achieve a budget surplus of 2,000 million rubles, and to set aside a reserve of about 10,000 million rubles for price reduction. Mezhlauk justified his proposal by reference to central committee policy:

The policy of further increasing real wages and gradually reducing unified [retail] prices, which has been firmly established by the central committee ... requires a reserve of approximately 8000 million rubles for price reduction.¹

The proposed drastic cut in investment was a high price to pay for price reduction. Gosplan's caution at this time requires further study.

In Molotov's absence, Stalin dominated the ensuing discussions. A revised version of Mezhlauk's memorandum, proposing an investment plan of 19 milliard (thousand million) rubles, was considered on July 21 at what Mezhlauk described in a later memorandum as a 'conference in the party central committee'. This was evidently not a formal session of the Politburo (if it had been, Mezhlauk would have named it as such), but a meeting in Stalin's office. Stalin's appointments diary records that on July 21 at various times between

¹ GARF, 5446/26/66, 266. We have not so far found a decision of the Politburo or Sovnarkom requiring a *specific* reduction of retail prices in 1936.

3 p.m. and 5 p.m. the following persons were in his office: Voroshilov, Tukhachevsky, Efimov (head of the Artillery Administration of the Red Army), Egorov (chief of the General Staff), Ordzhonikidze, Chubar', Kalinin, Mikoyan, Andreev, Mezhlauk, Yezhov and Kaganovich. The Politburo members remained until 5 p.m.; the military representatives left at 4.15; and Mezhlauk left at 4.45. If the investment plan was discussed with the military present except for the last thirty minutes, the discussion lasted 1 hour 20 minutes; if they were not present, it lasted only about half-an-hour.² Even the longer time was insufficient for a serious discussion of the investment plan. Stalin's opinion must have been formed in advance under the influence of the various government departments.

Following the meeting of July 21, Stalin wrote to Molotov referring to Mezhlauk's proposal and describing the outcome of the meeting:

Even with the most economical approach it would not work, especially if we bear in mind the point that the People's Commissariat of Defence must be fully satisfied in all circumstances. I proposed the figure of 22 milliard rubles – Mezhlauk and Chubar' have been instructed to make the allocations (propose them) on the basis of 22 milliard.

Stalin informed Molotov that, with the new total, Narkomtyazhprom would receive 6.5–6.7 milliard (instead of the 6 milliard proposed by Gosplan) and Narkomput' 3.5 milliard instead of 3. But this did not content the commissariats; Ordzhonikidze demanded 9 milliard, Kaganovich 4.5 and so on. Stalin was evidently ready for further concessions which would increase the investment plan:

We shall see. There are some things which we must not cut: the People's Commissariat for Defence; the repair of rail track and rolling stock plus the payment for new wagons and locomotives (Narkomput'); the building of schools (the People's Commissariat of Education); re-equipment (technical) (light industry); paper and cellulose factories (the timber industry); and certain very necessary enterprises (coal, oil, open-hearth furnaces, rolling mills, viscose factories, power stations, chemistry) (Narkomtyazhprom). This makes it more difficult. We shall see.³

² See the entries for July 21.

³ *Pis'ma* (1996), 249–50.

Four days later, on July 25, Molotov replied to Stalin, and was clearly anxious to prevent a further increase in the investment plan. He insisted that 'it is possible and necessary' to keep to the figure of 22 milliard:

I consider it extremely undesirable to increase the construction programme above 22 milliard rubles. I am guided in this by the desire to strengthen the ruble and also to reduce the cost of construction.⁴

Meanwhile, Mezhlauk, in a further memorandum to Stalin and Chubar', dated July 26, set out the new allocations on the basis of the 22 milliard total. Mezhlauk, obviously responding to the attitude of Stalin and the other members of the Politburo, admitted that the figure of 22 milliard would create great difficulties for Narkomtyazhprom and for light industry (the latter, for example, needed 1,400–1,500 million instead of the planned 1,050 million). He nevertheless insisted that an increase in the total above 22 milliard would be 'extremely difficult for financial reasons':

I consider that in these circumstances it would be desirable to confine the discussion to a possible small increase in investment for Narkomtyazhprom and Narkomlegprom, devoting most attention to a reduction in the cost of construction ... by at least 15–20 per cent.

Mezhlauk proposed that the food industry, the artisan cooperatives, education, health and the municipal economy should all be required to find any increase in investment from their own internal resources. For this purpose the government should issue a special decree permitting economic organisations to use their resources more freely, including accumulation for investment purposes outside the plan (*vneplanovye nakopleniya*). Mezhlauk criticised the existing arrangements, in which paving the streets, erecting street lamps, purchasing minor equipment, and minor building repair, all had to be included in the investment limits approved by the government. He estimated that the removal of these restrictions could yield a further 900 million rubles.⁵ These proposals were rejected by the Politburo, though this rejection proved temporary (see p. 269 below). On July 28 a full Politburo meeting was attended by 75 people, including not only orthodox central committee members but also Bukharin, Osinsky and

⁴ RGASPI, 558/11/769, 159–160.

⁵ GARF, 5446/26/66, 264–266.

Sokol'nikov. The 'directives on compiling the control figures for 1936' were the first item on the agenda, and the topic was addressed by Mezhlauk and Chubar', by the leaders of the major departments of state, including Ordzhonikidze, Kaganovich and Mikoyan, and by Kvirring and G. Smirnov from Gosplan and Kraval' from TsUNKhU. The Politburo resolved to increase the 1936 investment plan to 27.3 milliard rubles, with the proviso that construction costs would be reduced by 8 per cent, thus reducing the actual financial grant to 25.1 milliard rubles.⁶ The allocation to all the major sectors was increased, including education, health, municipal economy and the light, food and local industries as well as Narkomtyazhprom and the People's Commissariat for Defence (see Table 16). Stalin was evidently the moving force in this decision. On the day of the Politburo meeting he wrote to Molotov:

22mld was not enough, and, as can be seen, could not be enough. The increase in school building (+760 mil), light industry, timber, food industry and local industry (+900 mln rub and more), in defence (+1mld 100mln), in health, on the Moscow canal project and other items (over 400 mil r) determined the physiognomy and size of the control figures for 1936. I do not complain, because everything that increases the production of consumer goods for the mass market must be given more emphasis from year to year. Without this it is not possible to advance at present.⁷

Molotov had no alternative but to accept this *fait accompli*. In the final letter in this sequence, written to Stalin on August 2, he grudgingly indicated his acquiescent reluctance:

I would have preferred a smaller amount of capital construction, but I think that we shall cope if we put our shoulders to the wheel (*ponatuzhivshis'*) even with the approved plan of 25 mld r. The possibility of increasing industrial production by 23–22% favours this outcome.

He added – again putting aspiration ahead of realism – that it was also essential to place great emphasis on the reduction of construction costs.⁸ For the moment Stalin took Molotov's warnings into account. On August 7 the Politburo rejected a proposal from

⁶ RGASPI, 17/3/969, 1, 31–36. The Politburo decision was promulgated as an unpublished Sovnarkom decree on the same day (GARF, 5446/1/482, 92).

⁷ *Pis'ma* (1996), 251.

⁸ RGASPI, 558/11/769., 162–163.

Narkomzem that its investment plan for 1936 should be increased to 1,700 million rubles.⁹

The decree of July 28 also listed plans in physical terms for the production of 66 industrial products, often divided into sub-groups. It increased the planned increase in industrial production in Union and local industry as a whole to 22.5–23.5 per cent; Gosplan had proposed 25.3 per cent. The decree did not contain detailed figures about other aspects of the economy, and said nothing about the productivity of labour, the growth of the labour force, or industrial costs. The level of investment and its distribution was treated as the key set of figures in planning economic growth.

(B) THE ADOPTION OF THE PLAN, DECEMBER 1935–JANUARY 1936¹⁰

In spite of the sharp dispute, the 1936 investment plan as approved on July 28, 1935, could not be described as exceptionally ambitious – it was only 16.6 per cent larger than the revised 1935 investment plan approved in the same month. But this was by no means the end of the matter. Further major increases were made in the plan in December 1935. The December revision continued to reflect the multiple criteria advanced by Stalin to justify a higher level of investment. It was essential to increase expenditure on defence. But it was also essential to increase expenditure which would improve the standard of life of the population: on consumer industries, education and health (and on agriculture, expenditure on which was increased, though this was not specifically mentioned by Stalin). The revised plan, which also included substantially increased investment in the prestigious Moscow–Volga canal, was now 31,635 million rubles, 31.6 per cent higher than investment in 1935.¹¹

⁹ RGASPI, 17/163/1072, 166–167.

¹⁰ The approved 1936 plan was dealt with in various decrees in December 1935 and January 1936; the coverage differed, but only minor changes were made in the figures. Decrees not published: RGASPI, 17/3/973, 43–45 (directives of central party committee and Sovnarkom for 1936 plan, approved by Politburo December 4, 1935) and 60–63 (directives of central party committee and Sovnarkom on 1936 plan for capital investment, approved December 9); GARF, 5446/1/110, art. 85, 172–350 (Sovnarkom decree on 1936 plan, dated January 16, 1936). Published decrees: SZ, 1936, art. 32 (decree of TsIK session, dated January 14); PKh, 2, 1936, 257–87 ('basic indicators' of 1936 plan, sent to press January 19).

¹¹ RGASPI, 17/3/973, 60–63, dated December 9. The slightly revised plan, approved by TsIK on January 14, set the figure at 32,635 million rubles.

This was a major shift. Mikoyan, in his report to the central committee plenum in December 1935, cited Stalin's famous speech of January 1933, in which he called for a shift from the 'passion of *new construction*' to the 'passion of *assimilation*'. Mikoyan drew attention to a passage a couple of lines further on in Stalin's speech:

Only on this basis [assimilation] can we secure in, say, the second half of the second five-year plan, a new powerful jump forward both in the sphere of construction and in the sphere of production.¹²

Describing this statement as displaying 'prophetic genius', Mikoyan pointed out that the increase planned in capital investment in 1936 meant that 'now we, the whole country, have taken, as our Stalin said, a new powerful jump'.¹³

Further possibilities for the expansion of investment had already been provided by a Sovnarkom decree of September 19, 1935, taking further the suggestion made by Mezhlauk in the previous July (see p. 266 above).¹⁴ It provided that 'small-scale building and repair work, and the acquisition of small equipment and tools' could be carried out in addition to the investment plan. This *vneplanovyi* expenditure (expenditure outside the plan) was to be financed from profits received in excess of the plan, and where appropriate from the enterprise Fund for the Improvement of the Wellbeing of the Workers (FUBR). Ceilings were imposed on these expenditures, varying from 200 rubles in the case of equipment and tools to 10,000 rubles for a trading enterprise or large railway station, and as much as one million rubles for insured property destroyed by a natural disaster. All investment by *kolkhozy*, irrespective of its source, was also now classified as 'outside the plan'.

The plan for industrial production approved in December 1935 and January 1936 was more modest than the investment plan. It proposed an increase of 23 per cent in 1936, approximately the same figure as in the previous July.¹⁵ Against the background of the Stakhanov movement, this fell far short of the huge increase in production anticipated by Stalin and Molotov. The leaders evidently

¹² Stalin, *Soch.*, xiii, 186.

¹³ P, December 27, 1935.

¹⁴ SZ, 1935, art. 417.

¹⁵ As the expected production in 1935 was higher than had been anticipated, this was a higher figure in real terms, and the production plans in physical terms were about 10 per cent higher than in the July directives.

hoped that the experience of the first weeks and months of 1936 would enable them to increase the production plan.

The production plan was, however, strongly influenced by the Stakhanov movement in one important respect: its emphasis on the role of labour productivity, planned to rise by as much as 20 per cent, providing as much as 87 per cent of the increase in production.¹⁶ The number of workers in industry would rise by only 4.3 per cent.¹⁷

The plan took account of the decision of the December plenum of the party central committee to increase output norms throughout industry (see pp. 181–2 above), and on this basis estimated that the average wage would rise by only 10.2 per cent, less than half the increase in output. This, together with other economies, would enable industrial costs to be reduced by 6.2 per cent as compared with the average level in 1935.¹⁸

Behind the scenes, jointly with the published decisions about the state budget and costs, the usual secret negotiations about the credit and currency plans took place against the background of the considerable rise of currency issue in the fourth quarter of 1935 (see p. 191 above). The quixotic attempt at the beginning of 1935 to prohibit further currency issues (see p. 134 above) was abandoned. The 1936 currency plan proposed a more realistic net increase: 1,300 million rubles, 13.4 per cent.¹⁹

Both the investment and the production plans of 1936 embodied major changes in the distribution of resources, taking further the change in direction which had begun in 1934. Table 14 sets out the changes in investment as compared with the previous two years, Consumption, social services and defence were relatively favoured at the expense of producer goods. Investment in the main sectors of the economy was planned to increase as follows (in per cent) as compared with the expected level in 1935:²⁰

All industry of which	17.7
producer goods (means of production)	9.5
consumer goods (means of consumption)	55.0

¹⁶ SZ, 1936, art. 32 (January 14).

¹⁷ The increase was planned at 301,000 as compared with 426,000 in 1935 (PKh, 2, 1936, 260).

¹⁸ SZ, 1936, art. 32 (dated January 14).

¹⁹ RGASPI, 17/162/19, 15 (art. 179, dated December 15, 1935).

²⁰ PKh, 2, 1936, 258–9.

Agriculture	-20.7 ²¹
Transport	35.0
Communications	58.9
Trade	25.0
Cultural-welfare and administration	96.0
Whole economy	36.8

The planned increase in investment in consumer goods was unprecedented; it was to rise from 18.7 per cent of all investment in industry in 1935 to 23.7 per cent in 1936.

Investment was planned to increase even more rapidly in social and cultural services than in consumer goods. The planned percentage increase as compared with 1935 was as follows²²:

Urban and industrial housing	58.8
Municipal (including Moscow Metro)	32.5
Education	132.4
Health	62.8
All four above	60.4

The production plans for 1936 favoured consumption to an even greater extent. For the first time in the annual plans of the 1930s the production of consumer goods (Group B production) was planned to increase more rapidly than that of producer goods (Group A), by 23.7 as against 22.6 per cent. (The second five-year plan itself already foresaw a more rapid increase in Group B.) The increase in light industry production was to be particularly rapid.²³ The directives for the annual plan also emphasised:

Bearing in mind the considerable role of groups with high earnings – workers, collective farmers and engineering and technical personnel – the industrial commissariats should ensure the increased production of high-quality mass consumer goods.

²¹ The decline in investment in agriculture was due to the decision to reduce investment in sovkhozy. Investment by kolkhozy, which did not form part of the state plan, increased in 1936.

²² PKh, 2, 1936, 258–9. These figures include social and cultural investment by industry and other branches of the economy, which are excluded from ‘cultural-welfare and administration’ in the previous table.

²³ PKh, 2, 1936.

These included bicycles, motor cycles, gramophones and records, radios, watches, pianos and furniture, the production of which had been resumed slowly in the previous two years.²⁴

Both defence investment and current expenditure on defence were planned to increase even more rapidly than expenditure related to consumption.²⁵ The planned increase in 1936, nearly 90 per cent, was extremely high. Investment in Narkomoborony was planned to be more than double that in 1935, and investment in the armaments industries to increase by nearly 50 per cent:

Defence investment, 1935 (preliminary) and 1936 (plan)

	<i>1935 (preliminary)</i>	<i>1936 (plan)</i>	<i>Percentage increase</i>
Investment by Narkomoborony	1186 ¹	2400 ²	102.4
Defence investment by Narkomtyazhprom etc. ^a	1290 ³	1918 ⁴	48.7
Investment by Narkomvnudel	258 ⁵	835 ⁶	226.4
Total	2734	5153	88.5

Sources:

¹ See Harrison and Davies (1997), 380.

² RGASPI, 17/3/973, 62–63, dated December 9, 1935.

³ RGAE, 4372/91/2761, 133–122, dated November 14, 1935. Actual expenditure in 1935 amounted to only 900 million rubles.

⁴ GARF, 5446/502/40, 139–141 (Sovnarkom decree, dated February 8, 1936).

⁵ RGASPI, 17/3/969, 33–34 (dated July 28, 1935). This is the planned figure; preliminary results for 1935 have not been traced. It includes: Narkomvnudel 100; Dal'stroi 133; Osoaviakhim 5; Anti-aircraft defence 10; Noril'sk 10.

⁶ RGASPI, 17/3/973, 62–63. NKVD 150; Dal'stroi 200; anti-aircraft 10; Osoaviakhim 5; Noril'sk 50; Committee of Reserves 420.

Note:

^a Does not include investment of defence significance in civilian industries and factories, including in Narkomtyazhprom civilian factories.

Current expenditure on defence, for the maintenance of the armed forces and the cost of armaments ordered by Narkomoborony,

²⁴ RGASPI, 17/3/973, 44 (dated December 4, 1935).

²⁵ Although defence expenditure was now more frankly recorded in the budget, investment in the defence sector was still not shown in complete form even in confidential files.

was planned to increase at a similar pace. The budget for Narkomoborony, excluding investment, was planned to rise by 82.7 per cent, from 6,988 to 12,769 million rubles.²⁶

Armaments orders were hotly disputed. In current prices Narkomoborony claimed 7,735 million rubles, but this figure was cut to 5,412 million.²⁷ This reduced figure was still double the preliminary fulfilment for 1935, compensating for the shortfall in that year. All these planned increases measured in current prices were higher than the increase in real terms, but even allowing for this the increase in real terms was extremely high.²⁸

The squeeze on investment in producer goods resulting from the priority to consumption and defence meant that the Narkomtyazhprom investment allocation was slightly reduced, from 8,535 to 8,500 million rubles. This total included the substantial increase in investment in the armaments industries, so the allocation to civilian heavy industry was substantially reduced. Within the lower total, allocations to non-ferrous metals were increased by 60 per cent and to oil by 40 per cent.²⁹ Allocations to other important industries were drastically reduced. An article in the industrial newspaper 'New Developments in Capital Construction' claimed that 'we can successfully develop a number of industries with less investment than was planned earlier'.³⁰ The iron and steel industry was particularly affected. An article in the planning journal published in conjunction with the 1936 plan frankly stated:

The overfulfilment of the production plans for pig iron, and crude and rolled steel was achieved *in spite* of the reduction of the role of capital investment in every *year* of the five-year plan in comparison with the targets of the second five-year plan.

²⁶ Derived from Harrison and Davies (1997), 380.

²⁷ See Harrison and Davies (1997), 391.

²⁸ Of the increase of 3,147 million rubles in maintenance, only 129 million rubles was estimated to be due to the increase in the price of food and fodder following the abolition of rationing (see Harrison and Davies (1997), 401, note 66); and the increase in the prices of military equipment was estimated by Gosplan at 8.6 per cent – the chief of the General Staff gave higher figures (see *ibid.* 379).

²⁹ See G. Knyaz'kov in *ZI*, August 30, 1936. As a proportion of all Narkomtyazhprom investment, non-ferrous metals increased from 7.9 per cent in 1934 to 11 per cent in 1936 (plan), oil from 9.8 to 13.2 per cent.

³⁰ *ZI*, August 30, 1936 (G. Knyaz'kov). The author implausibly attributed this to the success of the Stakhanov movement.

The article acknowledged that this reduction in investment would continue. In 1936 there would be 'further reduction of investment in iron and steel (1,050 million rubles in comparison with 1,549 in 1935)'. Nevertheless, the production targets for 1937 set in the five-year plan would already be achieved in 1936.³¹

In the first few months of 1936 the investment plan continued to 'jump forward'. Further additions, mainly defence-related, were made to the 1936 investment plan, so that by the end of May 1936 it was 46 per cent larger than actual investment in 1935. The published version of the 1936 plan, prepared by Gosplan and with a preface by Mezhlauk, made a virtue of the investment expansion imposed on Gosplan from above. A year previously, the 1935 plan had stated that the 'stabilisation of the volume of finance for construction in comparison with 1934 corresponds to the tasks of 1935: the further strengthening of the ruble, the development of trade and the reduction of prices'.³² But the 1936 plan proclaimed that 'capital investment in 1936 alone amounts to 50% of total investment in the first three years of the second five-year plan'; '1936 is a year of the tremendous growth of construction'.³³

³¹ PKh, 2, 1936, 140 (A. Notkin and N. Tsagolov).

³² *Narodno-khozyaistvennyi plan 1935* (1935), 301.

³³ *Narodno-khozyaistvennyi plan 1936* (2nd edn, 1936), 269, 280.

CHAPTER TEN

THE POLITICAL CONTEXT OF ECONOMIC CHANGE, 1936

On March 1, 1936, Stalin, in his interview with the American journalist Roy Howard, remarked that 'it is difficult to say' whether the Japanese or the German regions were the greater source of the war danger: 'at present the Far Eastern source is the more active, but it is possible that the centre of the danger will move to Europe'.¹ This tentative prediction was dramatically fulfilled within a few days, when Germany on March 7 seized the Rhineland in violation of the Versailles treaty and the Locarno Pact. This threatening action at last led the French to ratify the Franco-Soviet Pact. And on May 3 the victory of the Popular Front in the French elections also strengthened Litvinov's case for collective security. However, the British remained hostile to any effort to curb Germany. On March 17 Lord Cranborne, under-secretary of state for foreign affairs, privately urged: 'Give Germany a free hand, as far as her and our League obligations permit, further East.'² When the League of Nations discussed the occupation of the Rhineland, Litvinov alone supported sanctions against Germany.

The Soviet Union nevertheless attempted to keep the door ajar for some rapprochement with Germany. Publicly Molotov, in an interview with Chastenet, editor of *Le Temps*, declared that 'the main direction determining the foreign policy of the Soviet government holds that an improvement of relations between Germany and the USSR is possible'.³ At this time Germany, in spite of the unremitting political hostility of the Nazis to the Soviet system, continued to explore the possibility of increasing its foreign trade credit to the USSR. Soviet counsels on this question were divided. Pyatakov, on behalf of Narkomtyazhprom, eagerly prepared to visit Berlin in pursuit of negotiations for a further loan.⁴ But, following the German occupation of the Rhineland, the Soviet Union temporarily broke off trade negotiations. Litvinov continued to strenuously oppose an

¹ I, March 5, 1936, Stalin, *Soch.*, xiv, 105.

² See Haslam (1984), 97.

³ I, March 24, 1936.

⁴ Krestinsky to Surits, January 11, 1936 – DVP, xix (1974), 25; Haslam (1984), 96.

extension of economic relations with Germany, arguing that this would play into Hitler's hands.⁵ In the course of 1936 negotiations continued intermittently, driven partly by German need for raw materials, partly by Soviet eagerness to obtain new military devices from Germany.⁶ On October 26 the Politburo decided that no further negotiations should take place about a larger German credit; instead the USSR should place orders for a reduced list of military items within the existing credit.⁷ But this decision did not prove to be final.

Meanwhile the threat of war greatly increased with the rebellion of Franco against the Spanish republican government, launched on July 17–18. By the end of the month Italy and Germany were already supplying arms to the rebels.⁸ After a brief attempt to supply arms to the republicans, Blum, the French Prime Minister, gave way to pressure from his allies in the Popular Front and the supply ceased.⁹ During August France and Britain sponsored a Non-Intervention agreement, which was signed by France, Britain, Germany, Italy, the Soviet Union and other powers. It was entirely ineffective. The Soviet Union responded to the intervention of the fascist powers by sending military experts to Spain, and on September 6 Stalin authorised the despatch 'as quickly as possible' of 50 bombers, 20,000 rifles and other military material to Spain via Mexico, together with airmen to train the Spanish crews.¹⁰ The first batch of military material arrived on September 17.¹¹

In the Far East Soviet relations with Japan temporarily improved with the appointment of Hirota as Prime Minister in March after the failure of a right-wing revolt. Hirota declared soon after taking office 'While I am Prime Minister there will be no war.'¹² But any hopes for an easement of Soviet–Japanese relations were shattered by the signature of the Anti-Comintern Pact between Germany and Japan on November 25, preceded by a separate agreement between Germany and Italy on October 21.¹³

⁵ Litvinov to Surits, April 19, 1936 – foreign policy archives, *cit.* VI, 5, 1991, 149.

⁶ See VI, 5, 1991, 149.

⁷ RGASPI, 17/162/20, art. 133.

⁸ See Haslam (1984), 107.

⁹ See Haslam (1984), 107.

¹⁰ Stalin to Kaganovich, SKP, 666.

¹¹ See Haslam (1984), 109–11.

¹² EZh, March 26, 1936.

¹³ See Haslam (1984), 121.

Three days after the signature of the Anti-Comintern pact, Litvinov in a powerful address to the VIII Congress of Soviets denounced the pact as a cover for a secret agreement which strengthened fascist aggression in both East and West, and called upon the peace-loving democratic peoples to respond.¹⁴ But Britain continued its appeasement of Germany, and France belied the hopes raised by the victory of the Popular Front by also seeking an accommodation with Germany.¹⁵

Throughout the year the war danger was emphasised in the Soviet press even more strongly than before. On the occasion of the X Komsomol Congress in April, *Pravda* published the greetings of the Congress to the Red Army, and an editorial 'Young Soviet Patriots' emphasised the role young people would play 'when the threatening hour comes'.¹⁶ Warnings about the looming danger of war gathered pace after the Franco rebellion. On July 29 *Pravda* carried a full page about the Soviet artillery. The theme of the war danger was taken up throughout the press. In the course of one week, the economic newspaper published articles on the danger of fascism, on financial preparations for war in capitalist countries, particularly Germany and Japan, and on the links of German fascism with the Spanish events.¹⁷ It also reported a rally of 120,000 people in Moscow which 'extended a hand of assistance to the Spanish people'.¹⁸

The threatening international situation had led the Soviet government as early as July 1935 to decide to double capital construction by Narkomoborony in 1936, while investment as a whole was planned at that time to increase by only 7 per cent.¹⁹ By the end of 1935 the authorities agreed to increase both investment and current expenditure for defence purposes in 1936 to more than 80 per cent above the 1935 level. These planned increases measured in current prices were higher than the increase in real terms, but even allowing for inflation the planned increase in real terms was extremely high.

In the course of 1936 all the main items of defence expenditure were increased by further *ad hoc* decisions. Eventually the budget allocations to Narkomoborony for both capital construction and

¹⁴ DVP, xix (1974), 717–19.

¹⁵ See Haslam (1984), 123–5.

¹⁶ P, April 16, 1936.

¹⁷ EZh, 1, 4, and 6, 1936.

¹⁸ EZh, August 4, 1936.

¹⁹ GARF, 5446/1/482, 92 (art. 1632/254s, dated July 28).

military equipment were more than double the level actually achieved in 1935.²⁰

In the first few weeks of 1936 the Politburo launched a series of measures to strengthen the defence of the Far East. On January 11 a far-reaching decision provided for the construction in the Far Eastern Region of roads, petrol stations, aircraft and artillery repair bases, and shipbuilding facilities.²¹ A further decision set out a four-year programme for the construction in the Far East and Eastern Siberia of oil storage units, and for the expansion of the Khabarovsk oil refinery to enable it to produce aircraft fuel.²² On February 20 the lion's share of an expanded budget for the construction of strategic roads was allocated to the Far East Military District.²³

These measures were part of the continued policy of strengthening the frontier regions. On March 23 the NKVD was allocated additional investment for frontier defence.²⁴ At the same time the earlier policy continued (see p. 97 above) of clearing the frontiers from what were considered untrustworthy social and ethnic groups. A Politburo decision dated February 9 enabled the NKVD to exile from the frontier districts of the Far East 'up to' 1,500 persons who had been expelled from the party.²⁵ On April 28 the Politburo adopted a resolution to transfer 15,000 Polish and German households from Ukraine to Kazakhstan.²⁶ Between June and September a total of 69,283 people were relocated.²⁷ None of the regions bordering on foreign countries was exempt. On December 16 a Politburo decision ordered the 'cleansing' of the frontier areas of Azerbaijan; kulak families who had returned from exile, former policemen, elders, mullahs and others were to be sent to distant areas. A further clause instructed the authorities, gradually in the course of 1937, not to renew the residence permits of 2,500 Iranian subjects living in Azerbaijan.²⁸

²⁰ See Harrison and Davies (1997), 380.

²¹ RGASPI, 17/162/19, 27–29 (art. 182).

²² RGASPI, 17/162/19, 73–75, 93–97 (art. 80), dated February 18.

²³ RGASPI, 17/162/19, 81–82 (art. 208). The Far East was allocated 180 out of a total of 313 million rubles.

²⁴ RGASPI, 17/162/19, 124 (art. 108).

²⁵ *Lubyanka (1922–1936)* (2003), 723.

²⁶ RGASPI, 17/162/19, 159, 174–176 (art. 57).

²⁷ GARF, 9479/1/36, 23.

²⁸ RGASPI, 17/162/19, 131–132 (art. 374).

Severe restrictions were imposed on political immigrants living in the USSR. The most important decision, aiming at their extensive control and removal, was unprepossessingly entitled 'Measures to Protect the USSR from Penetration by Spying, Terrorist and Diversionist Gangs'. It closed down the special facilities afforded to MOPR and the Communist International to manage the immigration to the USSR of political refugees. In future, clandestine crossing points should be controlled only by army intelligence, should be known to only two persons and should frequently change. All political immigrants at present in the USSR were to be examined by a small commission which would decide who should be deported from the USSR, who should be sent back abroad for illegal work, and who should remain in the USSR. Political emigrants remaining in the USSR should include only those subject to the death sentence or long prison sentences abroad, and sick persons incapable of working in the revolutionary underground. This secret Politburo decision asserted that some of the political immigrants were 'direct agents of the intelligence and police agencies of capitalist states'.²⁹ By July 1, 5,678 political immigrants had been registered, and 'compromising materials' were allegedly found about 2,210 of them.³⁰ At the end of 1936 the sweeping arrests of Polish communists in exile began, and soon led to the collapse of the Polish party.³¹ These developments in turn implicated prominent Soviet officials of Polish origin, including I. S. Unshlikht, a central figure since the civil war in the Red Army and later in military industry.

The increased allocation of resources to defence was accompanied by the further centralisation of Soviet administration. Further institutions and functions were transferred from civilian control to the NKVD. The NKVD took over the functions of the long-established All-Union Resettlement Committee, which had continued the pre-revolutionary voluntary resettlement of peasants from labour-surplus to under-populated areas.³² Several new committees and commissariats were established under Sovnarkom to take over functions previously controlled by the republics or by the commissariats.

²⁹ RGASPI, 17/162/19, 79, 98–100 (art. 190), dated February 28.

³⁰ *Lubyanka (1922–1936)* (2003), 823, n.171.

³¹ See *Svobodnaya mysl'*, 3, 1998, 56 (Ye. E. Gorbunov).

³² SZ 1936, art. 322 (decree of TsIK and Sovnarkom, dated July 10). On June 26 Glavmerves, responsible for weights and measures, was also transferred to the NKVD.

On January 17 an All-Union Committee for the Arts attached to Sovnarkom managed the cultural activities previously administered by republican People's Commissariats of Education; these included theatre, the visual arts, architecture and museums.³³ On May 21 an All-Union Committee for Higher Education attached to Sovnarkom was established to coordinate the activity of the commissariats and other government departments; these continued, however, to administer the higher education establishments themselves.³⁴ On July 20 two major new all-Union commissariats – for health and justice – took over important functions from their republican equivalents: the new Narkomyust was to 'unify all civil and criminal law'.³⁵ On November 14 a Chief Administration for Hydro-Meteorological Services attached to Sovnarkom undertook functions previously managed by Narkomzem. The decree stated that this was 'in accordance with the growing interests of the economy and the defence of the country'; the new administration would 'exercise centralised leadership via subordinate local agencies'.³⁶

With economic administration, the changes were more ambiguous. On January 19 a Committee for Industrial Cooperatives and Artisan Industry attached to Sovnarkom was established, consisting of key officials from the relevant government departments and responsible for coordinating the numerous scattered enterprises.³⁷ On August 31 the so-called 'convention bureaux', responsible for coordinating 'decentralised purchases' of non-grain products, which had been established in 1932 at the time of 'neo-Nep', were abolished; their functions were absorbed by Komzag and its plenipotentiaries, and their Nep-sounding name vanished into history.³⁸ These measures placed more authority in the hands of the Politburo and the Sovnarkom

³³ SZ 1936, art. 40 (decree of TsIK and Sovnarkom). On May 17 the committee took over children's theatres and the puppet theatre (see Maksimenkov (1997), 71).

³⁴ SZ 1936, art. 250 (decree of TsIK and Sovnarkom). The new committee absorbed the activities of the committee on higher technical education. The All-Union Attestation Commission (VAK), established on November 24, was made responsible for confirming the award of all higher degrees; it continued to trouble higher education establishments in the post-Soviet era.

³⁵ SZ 1936, arts. 337 and 338 (decrees of TsIK and Sovnarkom). The procuracies and investigating agencies of the republican Narkomyusty were transferred to the Procuracy of the USSR.

³⁶ SZ 1936, art. 449 (decree of TsIK and Sovnarkom).

³⁷ SZ 1936, art. 53.

³⁸ SZ 1936, art. 408.

machinery. But 1936 was also a year in which efforts were at their maximum to establish market and quasi-market relations which would strengthen the influence of consumers on production. On October 19 People's Commissariats for the Light, Food and Timber Industries, and for Grain and Livestock Sovkhozy, were established in the Russian Republic; the existing All-Union Commissariats were accordingly transformed into Union-Republic Commissariats.³⁹

In the political sphere, particularly in the first few months, 1936 was also an ambiguous year. Together with the measures against ethnic minorities living in the frontier areas and foreigners generally (see p. 278 above), from the beginning of 1936 stronger measures were also adopted against former oppositionists, particularly ex-Trotskyites. On February 9 the NKVD sent a directive to its local agencies instructing them that the Trotskyite–Zinoviev underground should be completely eliminated.⁴⁰ On February 27 the Politburo ruled that an archive about Trotsky which had been recently discovered in the USSR, together with other documents about him, should be examined by Yezhov with the aim of exposing 'counter-revolutionary Trotskyite double-dealers'; those arrested should be questioned jointly by the NKVD and Yezhov (Yezhov was still formally a party official, but had been placed at the centre of cases dealing with alleged counter-revolutionary activities).⁴¹ On May 20 a further Politburo decision noted the 'unceasing counter-revolutionary activity of Trotskyites in exile, and of those expelled from the party'. Trotskyites had so far lived in relatively favourable conditions as compared with other exiles. Now over 600 of them were to be transferred to 'remote concentration camps' for periods of 3–5 years, and the same penalty was to be imposed on ex-Trotskyites at present living in 15 listed major cities who had 'manifested hostile activity'. The cases of Trotskyites under arrest who were found to have engaged in terrorism were to be transferred to the Supreme Court, and they were to be sentenced to death by shooting.⁴² By the middle of 1936 about five thousand oppositionists had been arrested; the number increased to 23,279 by the end of the year.⁴³

³⁹ SZ, 1936, art. 631 (decree of TsIK).

⁴⁰ *Reabilitatsiya* (1991), 216.

⁴¹ RGASPI, 17/162/19, 78 (art. 155).

⁴² RGASPI, 17/162/19, 172 (art. 244).

⁴³ Khaustov and Samuelson (2009), 93. In 1934 only 631 Trotskyites and Zinovievites had been arrested.

Supporters of Zinoviev and Kamenev were similarly accused of counter-revolutionary activity. On January 11 a memorandum from Yagoda and Vyshinsky to Stalin listed 41 Zinovievites, and gave a detailed account of their alleged activities. In some cases of alleged terrorist plots, not involving former party members, the death penalty was unhesitatingly applied. Stalin wrote on a memorandum about an alleged plot to assassinate Zhdanov 'I propose shoot all three.'⁴⁴

However, in the first months of 1936 some circumspection was also exercised. Thus on January 31 the Politburo resolved that the death penalty should not be applied in relation to the leaders of the 41 Zinovievites.⁴⁵ This circumspection was one aspect of the great incongruity of 1936, already a feature of 1935. On the one hand, the drive towards eliminating all potential hostility to the regime – and all deviation from its policies – accelerated, culminating in the terror of 1937–38. On the other hand, this was a year of an attempted grand reconciliation within society, symbolised by the highly publicised adoption of the new Constitution in December. Soviet society was presented as both socialist and democratic. In his interview with Roy Howard on March 1, Stalin even foresaw 'election contests' and 'very lively election campaigns'.⁴⁶ This was of course partly an effort to present the USSR as a worthy member of the hoped-for alliance with the Western democracies against the menace of fascism. But it was also a bizarre and self-contradictory attempt to unify Soviet society.

A series of practical steps continued the relative moderation of 1934–35, particularly during the first six months of 1936. First and foremost, the authorities sought to demonstrate that there was now an honourable place in Soviet society for former alleged enemies, providing they were loyal to the regime in word and deed. In Narkomtyazhprom Ordzhonikidze's belief in the usefulness of the non-party specialists for the moment prevailed. On February 4, the Politburo granted an amnesty to nine of the principal defendants in the Promparty trial of 1930, including Ramzin and Larichev, announcing their 'complete repentance' and 'their

⁴⁴ *Lubyanka (1932–1936)* (2003), 714–15 (January 7, 1936). Similarly, on a proposal to execute three organisers of an alleged terrorist group plotting to kill Stalin, Stalin simply wrote one word *za* (in favour): *Lubyanka (1932–1936)* (2003), 741–2 (March 16).

⁴⁵ RGASPI, 17/162/19, 40 (art. 343).

⁴⁶ P, March 3, 1936.

conscientious accomplishment of major state tasks'. The decree stated that this measure was supported by Narkomtyazhprom (where they worked).⁴⁷ A few months later, on August 22, while the Zinoviev–Kamenev trial was in progress, the sentence on the chief energy engineer of Magnitogorsk was cancelled.⁴⁸ Such decisions were not confined to Narkomtyazhprom. In the same month all political and civil rights were restored to four specialists in the food industry.⁴⁹

In this spirit further measures continued to conciliate peasants who had been expelled from their villages or otherwise punished in the early 1930s. On January 16, the Politburo resolved that sentences imposed on peasants on the basis of the decree of August 7, 1932, should be re-examined; by July 1936 in 97,000 of the 115,000 cases examined the sentences were ruled to have been incorrect.⁵⁰ On May 20 the Politburo resolved that cases should be re-examined by the Procuracy and the Supreme Court when appeals had been rejected from collective farmers in the Ivanovo, Leningrad and North Caucasus regions.⁵¹

A further example of continued moderation was the extension of the policy of treating the children of expropriated kulaks as independent of their parents (see p. 26 above); this policy now also applied to the children of citizens who had been expelled from Leningrad after the murder of Kirov. On February 28 the Politburo decided that the exile of students and others engaged in useful work who had been expelled from Leningrad with their parents should be cancelled and that they should have the right to live anywhere in the USSR.⁵² A further decision, dated April 20, permitted the dependents of persons expelled from 'regime locations' (i.e. locations requiring an internal passport) to be transferred to other members of the family still living in these locations.⁵³ Even as late as September the Politburo confirmed that persons expelled from Leningrad who had

⁴⁷ SZ, 1936, art. 92. Ramzin invented the 'once-through boiler'.

⁴⁸ SZ, 1936, art. 391 (decree of TsIK).

⁴⁹ SZ, 1936, art. 390 (decree of TsIK, dated August 1).

⁵⁰ See Khlevnyuk (1996), 150–1.

⁵¹ RGASPI, 17/3/971, 32–33.

⁵² See Khlevnyuk (1996), 154 and RGASPI, 17/3/976, 17 (dated April 20).

⁵³ RGASPI, 17/3/976, 17; the members of the family must be either students or engaged in socially useful work.

not been accused of specific crimes should retain their voting and pension rights.⁵⁴

The practice of dismissing socially suspect employees, widespread in earlier years, was significantly moderated in 1936. In April and May, trade union officials in a series of memoranda complained that dismissals were undertaken arbitrarily, and secured the simplification of the method of dealing with complaints. The secretary of the Moscow trade unions argued that 'concealment of social origin by incorrectly completing a questionnaire, if there has been a long period of conscientious work, could involve a penalty such as a reprimand; dismissal is not obligatory', and the head of the wages department of AUCCTU insisted that 'children of those deprived of the vote, and similar categories of citizens, cannot be dismissed because of their social origin, if their own rights are not restricted and they are exemplary workers'.⁵⁵ The Soviet Control Commission, meeting May 22–26, 1936, resolved that the dismissal of, or failure to appoint, people 'because of their social origins, past convictions, the conviction of their parents or relatives, etc.' should cease. A *Pravda* editorial commented that with the completion of the construction of a socialist society such practices had 'lost their significance'.⁵⁶

The effort to attract the support of the Cossacks (see p. 105 above) continued. On April 20 TsIK, 'bearing in mind the devotion of the Cossacks to Soviet power', removed all restrictions on Cossack service in the Red Army, except for those on whom court sentences had been imposed.⁵⁷

All these decisions were announced publicly.

But perhaps the most striking indication that in some respects the policy of reconciliation was – for the moment – continuing was the decision in April to permit Bukharin, together with Adoratsky and others, to travel to Paris in an attempt to purchase some manuscripts by Karl Marx.⁵⁸ It was on this occasion that the famous conversation took place between Bukharin and Nicolaevsky, the best-known Menshevik in exile.

⁵⁴ RGASPI, 17/3/980, 9.

⁵⁵ GARE, 5451/20/172, 1–20, 29–31.

⁵⁶ P, May 30, 1936.

⁵⁷ SZ, 1936, art. 198.

⁵⁸ RGASPI, 17/162/19, 128, 137–138 (dated April 19).

This easing of repression during the spring and summer of 1936 is, however, far less than half the story. Dark clouds hovered over and increasingly dominated the political scene. During May and June, as a result of familiar methods of interrogation, former supporters of the Leningrad and Left oppositions provided testimony to the NKVD of the existence and influence of a joint Trotskyite–Zinovievite conspiracy.

Following these developments behind the scenes, a major change in policy soon became clear. The death of Maksim Gorky on June 18 assisted the move to greater repression. Gorky had played a significant part in defending the position of old revolutionaries and others, though his influence had been declining for some time. On July 6 an article by Bukharin praising the democratic features of the new constitution was published in *Izvestiya*, but nothing further by him appeared in the press.⁵⁹ Then in the last week of July both Kamenev and Zinoviev were successfully pressured into admitting the existence of a centre which planned terrorist activities, and on this basis the central party committee on July 29 circulated a long secret letter to party organisations down to the district level which provided detailed testimony about the existence of a united Trotskyite–Zinovievite centre controlled by Trotsky.⁶⁰ Following the central committee letter, the danger of sabotage was again emphasised in the press. Thus an editorial in the industrial newspaper revived the call for ‘watchfulness’, declaring that without it the ‘Trotsky–Zinoviev swine’ would organise the ‘breakdown of the economy of an enterprise’, citing the Aviation Institute in Rybinsk.⁶¹ The trial of Zinoviev, Kamenev and 14 others followed on August 19–24.

The extent of the repressions in 1936 exhibited the ambiguity characteristic of many aspects of the political situation. On the one hand, the assessment by the NKVD of the danger of social unrest among disaffected sections of the population became much more optimistic, as was indicated in an important report by Yagoda to Sovnarkom in March.⁶² He declared that the police had made

⁵⁹ He continued formally as editor until he was replaced on January 16, 1937 (RGASPI, 17/3/983, art. 131). He appeared on the platform in Red Square on November 7 at Stalin’s invitation.

⁶⁰ The text of the letter is published in *Reabilitatsiya* (1991), 196–210.

⁶¹ *ZI*, August 9, 1936.

⁶² See D. Shearer in *Cahiers du Monde russe*, vol. 42, no. 2–4 (2001), 506.

significant advances towards securing social order and reducing criminality, and even boasted that there were fewer murders in the whole of the USSR in 1935 than in the city of Chicago! Yagoda's relative optimism about the social situation was reflected in his far-reaching legislation ameliorating the conditions in the Gulag (see pp. 345–6 below). The number of executions continued to decline, and the number of arrests by the NKVD fell substantially. The death rate among those confined in camps also continued to decline. On the other hand, the total number of sentences following arrests by the NKVD somewhat increased; this was probably a result of the large number of cases held over from the previous period.

	1935	1936	Per cent increase (+) or decrease (–)
Arrests	193083	131168	–32.1
Sentences ^a : including	267064	274688	+2.6
Death sentences	1229	1118	–9.0
Sentences to camps and prison	185836	219436	+18.1
Sentences to exile	33599	23719	–29.4

Note: ^a Includes sentences by military collegia.

Data on the number of sentences by the civil courts in the Russian republic also show a decline as compared with 1935. The total number of sentences by these courts declined from 982,713 to 771,463, the lowest since 1925. Within this total the number of sentences to imprisonment for one year or more declined from 344,932 to 229,428.⁶³

The total number of persons in NKVD camps declined during 1936 from 839,000 to 821,000 (see Table 24), largely because of the substantial increase in the number of persons released from camps. The number of persons in special settlements also declined, from 1,017,000 to 917,000 (see Table 24), because fewer persons were exiled to the settlements.

The major modification of Soviet ideology, launched in 1934, revising the assessment of the past, was taken much further in 1936. On January 27 *Pravda* published a resolution of the party central committee and Sovnarkom which explicitly attacked for the first time 'the so-called "historical school of Pokrovsky"', and its baleful

⁶³ Dugin (1990), 59; see also Zvyagintsev and Orlov (2001), 530–1.

influence on history textbooks. This was immediately followed by articles from Bukharin and others vigorously condemning Pokrovsky (who had died from natural causes in 1932). The authors stressed the progressive role of the formation of the Russian state and of Peter the Great's reforms, which Pokrovsky had disputed.⁶⁴ 'Know and Love the History of Your Motherland', *Pravda* proclaimed shortly afterwards.⁶⁵ Bukharin himself had already been criticised by *Pravda* for his article in *Izvestiya* which claimed that the Bolsheviks had been needed 'to create "the shock brigade of the world proletariat" out of an amorphous mass in a country where oblomovshchina was the most universal feature of their character, where the *nation* of Oblomovs predominated'.⁶⁶

Later in the year, Demyan Bedny's play 'Heroes' (*Bogatyri*) was condemned by the Politburo for depicting Prince Vladimir as holding a drunken party after his baptism at the time of the conversion of Kievan Rus' to Christianity in 988.⁶⁷ The revision of the approach to history was far-reaching. The Politburo decision on *Bogatyri* condemned its 'anti-historical contemptuous depiction of the conversion of Rus' to Christianity, which in reality was a positive step', bringing the Slav peoples closer to 'peoples of a higher culture'.⁶⁸

In July, Academician N. N. Luzin, a leading mathematician, was strongly criticised in *Pravda* for his lack of patriotism. In particular he was condemned for publishing papers in foreign journals before they had appeared in the Soviet Union: he had displayed a 'lackey-like servility to everything marked with a foreign stamp'.⁶⁹ These charges, a precursor of the treatment of other scientists during the post-war anti-cosmopolitan campaign, were followed by resolutions critical of Luzin from both a commission of the Academy of Sciences established to consider the charges against him and from the Academy presidium. The presidium threatened that he might be deprived of

⁶⁴ I, January 27, 1936 (Bukharin), P, February 1, 1936 (V. Bystryanskii).

⁶⁵ P, March 7, 1936; see also Platt and Brandenberger (2006), 150 (Perrie).

⁶⁶ I, January 21, 1936; P, February 10, 1936. He withdrew the expression 'nation of Oblomovs' in I, February 14, 1936. Oblomov was the nobleman and small landlord who spent his time lying on a couch and dreaming in Goncharov's novel 'Oblomov' of 1859.

⁶⁷ RGASPI, 17/3/202, 80 (November 14, 1936); P, November 14 and 15, 1936 (Kerzhentsev). Kerzhentsev was appointed head of the Committee for the Arts in January 1936.

⁶⁸ RGASPI, 17/3//202, 80 (dated November 14, 1936).

⁶⁹ P, July 3, 9, 1936.

his title of Academician, but no further action followed.⁷⁰ Publication of Soviet papers in foreign journals diminished, but continued, in the pre-war years after 1936.⁷¹ Towards the end of the year, in what was now a standard expression of Soviet patriotism, the director of the Hermitage called for 'the rooting out of cases of contempt for the heroic past of the people'.⁷²

The new history was to be conveyed to the population – and particularly to young people – in simple concepts and with a strong message. In January the party central committee and Sovnarkom established a commission on Soviet history textbooks chaired by Zhdanov; and a few weeks later TsIK and Sovnarkom announced a competition – with generous money awards – for the best textbook for 10–12 year olds on the history of the USSR 'with short references to general history'. It should include the main dates and individuals, and should be 'specific and historically justified ... clear, interesting and fully comprehensible', and should include a glossary of difficult and foreign words.⁷³

Another step in the direction of simplifying and standardising education was taken, following a discussion in the Politburo, by a further commission headed by Zhdanov, which was instructed to prepare a decree directed towards the elimination of 'pedology' in Soviet education.⁷⁴ 'Pedology', long established in pre-revolutionary Russia and very popular in the United States, made extensive use of intelligence tests and tests of ability in order to place children in schools and classes at appropriate levels. The decree, issued in the name of the central committee, was approved by the Politburo on July 4, and fiercely criticised pedology as a channel for control of education separate from normal pedagogy, and consisting in the main of 'pseudo-scientific experiments and carrying out among pupils and their parents an endless number of investigations in the form of senseless and harmful questionnaires and tests', as a result of which an increasing number of children had been assigned to special schools, usually of indifferent quality. Pedology was brought to an end, and most children were returned from the special schools

⁷⁰ P, July 14, August 6, 1936.

⁷¹ See SR, 49 (1990), 90–108 (A. E. Levin). The Luzin case is discussed in detail, using Academy of Science archives, in VAN, 4, 1989, 102–13 (A. P. Yushkevich).

⁷² P, November 16, 1936.

⁷³ SZ 1936, art. 45 (January 26), art. 111 (March 3).

⁷⁴ RGASPI, 17/3/978, 2 (item IV of Politburo session of June 27).

to normal schools.⁷⁵ This was a major further step towards the standardisation of education, following the condemnation in 1931 of the project method and other forms of experimental teaching (see vol. 4 of this series, pp. 77–8).

More or less simultaneously, following an intensive discussion in the press, on June 27 the Politburo approved the famous decree which abolished abortion (abortion had been made legal in November 1920), and sought to strengthen the family and the role of the mother. The decree provided additional payments to mothers, imposed severe penalties on fathers separated from their family who failed to pay alimony, and planned a rapid increase in the number of places in creches and kindergartens.⁷⁶

All these measures formed part of an attempt to establish a revised ideology in every walk of life which would provide the education and culture of a new, Soviet, type of human being. On January 28, 1936, the day after Stalin, Molotov, Zhdanov and Mikoyan attended Shostakovich's opera 'Lady Macbeth of Mtsensk Province', *Pravda* published its notorious article condemning the opera, which had been widely praised when it appeared in 1935. According to *Pravda*, its music was 'dissonant', and it presented a 'predatory market woman' as a victim of society.⁷⁷ Stalin did not merely condemn *Lady Macbeth*. He had previously watched I. I. Dzerzhinskii's opera *Quiet Flows the Don* (Tikhii Don), based on Sholokhov's novel, and publicly praised its 'considerable ideological and political value'.⁷⁸ The head of the Committee on the Arts, Kerzhentsev, a veteran Bolshevik administrator, embarked unsuccessfully on an effort to create a Soviet socialist opera by the close cooperation of composers and the party leadership.⁷⁹ He also played an active part in the switch in the visual

⁷⁵ Decree 'Pedagogical Distortions in the System of People's Commissariats of Education': RGASPI, 17/3/979, 70–73.

⁷⁶ RGASPI, 17/3/978, 1 (item 1 on Politburo agenda), 80–86 (decree of TsIK and Sovnarkom). The issue was first discussed at the Politburo on March 9 (RGASPI, 17/3/975 (item IV of Politburo session). For a translation of the decree and extensive excerpts from the preceding press discussion see Schlesinger (1949), 251–79.

⁷⁷ On this episode see Maksimenkov (1997), and Fitzpatrick (1992). Stalin and Molotov had attended the opera on January 26.

⁷⁸ See Maksimenkov (1997), 67.

⁷⁹ See Maksimenkov (1997), 116–21. The director of the Bolshoi Theatre, Golovanov, and its artistic director, were replaced by more amenable figures. By an irony of fate, Golovanov was restored to his post a decade later, this time as a supporter of classical opera against modernist experimentation.

arts from modernist experimentation to a socialist realism based on but nearly always markedly inferior to traditional styles. In May 1936 in a memorandum to Stalin and Molotov he condemned 'formalism and naturalism', citing as examples from Moscow galleries works by Tatlin, Kandinskii, Malevich and others: such works should be transferred to a 'special building closed to the mass spectator'.⁸⁰ This approach to the arts prevailed throughout the rest of Soviet history.

The restoration of the traditions of the past was associated with pressure on all the Soviet arts to present heroes from the past and present who provided reliable examples of exemplary human conduct for the present generation. A striking example in practice was provided by the non-stop flight in July from Moscow to the Far East of Chkalov, Baidakov and Belyaev. On August 13 at a reception for them Stalin praised their ability to combine 'boldness and courage with knowledge and the ability to utilise the latest advances of technology', and on the same day three islands were named after them.⁸¹

In the country at large, the celebratory activities familiar in the previous couple of years were continued. In Moscow on May 1, 'decorative lights illuminate the streets and there is music everywhere'.⁸² For the population at large the standard of living continued to improve slightly, for both peasants and industrial workers, owing to the improved agricultural production in the agricultural year 1935/36, and the continued increase in the production of industrial consumer goods. But there was a sharp change in the food situation in the last few months of the year, as the effect of the bad harvest of 1936 began to be felt. Bread shortages were frequently reported. According to a watchman in Tyumen' woodworking factory, for example, 'People stand in line for six to eight hours a day'.⁸³ In the countryside the areas which had suffered drought began to experience a shortage of grain.⁸⁴ And throughout the year, the scarcity of industrial consumer goods continued, owing to the failure to carry out retail price increases similar to the food price increases after the abolition of rationing.

⁸⁰ See Malsimenkov (1997), 227–9.

⁸¹ P, August 14, 1936; SZ 1936, art. 389 (decree of TsIK dated August 13).

⁸² Garros *et al.*, eds (1995), 169 (Shtange).

⁸³ Garros *et al.*, eds (1995), 130 (Arzhilovsky, an ex-peasant recently released from a camp).

⁸⁴ See the NKVD report on grain shortages in Orenburg kolkhozy, dated November 28, 1936, in TSD, iv (2002), 900–904.

By the end of the year the alarming external events of 1936 – the occupation of the Rhineland, the rebellion in Spain, and the anti-Comintern Pact, together with the failure of Litvinov's drive for collective security – led Soviet spokesmen to stress even more than at the beginning of the year that the Soviet Union must and could rely on its own strength in a dangerous world. Voroshilov, addressing the Military Council of Narkomoborony on October 19, 1936, frankly declared that 'both Japan and Germany, especially Germany, have recently put it across to the whole world that they are preparing for war with world Bolshevism and primarily with its source – Moscow':

War is approaching with dizzy speed, and war is resisted only by the Soviet Union – by ourselves and our glorious Workers' and Peasants' Red Army.⁸⁵

The very ambitious plans for the increase in defence expenditure in 1936 were not fully realised. But the increase was very substantial. In terms of current prices, total budget expenditure on defence increased by 82 per cent; and within this total the outlays of Narkomoborony on maintenance and other non-capital expenditures increased by 77 per cent, reaching 88 per cent of the planned figure, while Narkomoborony expenditure on capital investment increased as much as 112 per cent, investment in the armaments industries by 62 per cent. As a result, total investment in defence increased from 8.1 to 11.9 per cent of all capital investment.⁸⁶ Figures

⁸⁵ *Voennyi sovet okt. 1936* (2009), 419.

⁸⁶ (million rubles)

	1935 <i>actual</i>	1936 <i>plan</i>	1936 <i>actual</i>
Defence expenditure recorded in state budget	8174		14858
Investment			
By Narkomoborony	1186	2428	2518
By Narkomtyazhprom ^a	905		1467
Non-investment expenditure			
Narkomoborony maintenance	4762	8180	7782
Narkomoborony military equipment	2226	5914	4558

Source: see Harrison and Davies (1997).

Note: ^a Covers only expenditure of Narkomtyazhprom (Narkomoboronprom), excluding investment by other government departments.

in current prices overestimate the growth of expenditure. Current prices of maintenance increased as a result of the price changes consequent upon the abolition of consumer rationing, and current prices of defence investment increased as a result of the abolition of some subsidies to the defence sector. But they reflect the growing role of defence in the economy: state budget expenditure on defence increased from 11.1 to 16.1 per cent of all budget expenditure.

While more moderate policies continued to prevail in industry until the end of August (see pp. 282–3 above), on July 14, the first major action was undertaken which began to spread the repressions to the centre of economic power. Mar'yasin was dismissed from his post as head of Gosbank.⁸⁷ This dismissal, reported quietly in the press, for a short time seemed to have been due to a disagreement on one or more of the recent contentious financial issues: the size of the currency issue, conversion of the state loans, or the price reform.⁸⁸ But, following reports of inefficiencies in the bank, some weeks after Mar'yasin's dismissal the Zinoviev–Kamenev trial took place. At the trial both Mar'yasin's associate Arkus, until recently a deputy director of Gosbank, and the head of the Industrial Bank, Tumanov, were condemned for supplying money to the conspiracy.⁸⁹ A few days after the trial a sensational account of a meeting of the Gosbank party group appeared in the economic newspaper.⁹⁰ This denounced Arkus, as a 'counter-revolutionary who stole money from the socialist

⁸⁷ SZ, 1936, ii, art. 230. The same decree replaced him by S. L. Kruglikov. Kruglikov, an old Bolshevik like Mar'yasin, became a party member in 1918, and after holding various party posts during the civil war, worked in Vesenkha from December 1920. He studied economics at the Institute of Red Professors in 1925–29, and held senior posts in Vesenkha and Narkomtyazhprom from 1931 until his new appointment. Mar'yasin was appointed as head of the Trade, Financial and Planning Department of the central committee in place of Bauman, who was transferred to the post of head of the Science Department of the central committee (RGASPI, 17/3/969, 34 – art. 151). But three days later, on July 17, Mar'yasin's appointment was rescinded, and he was 'placed at the disposal of the central committee' (RGASPI, 17/3/969, 41 – art. 161).

⁸⁸ Behind the scenes the party central control commission, in a report dated March 31, 1936, had already condemned Mar'yasin's issue of currency in excess of the approved ceiling at the end of 1935 (see pp. 190–2 above), as 'a most crude violation of state discipline by the leadership of the bank' (GARF, 5446/26/73, 6–4).

⁸⁹ Yezhov and Kaganovich to Stalin, August 20, 1936: SKP, 637.

⁹⁰ 'On the Corrupt Liberals and Double Dealers from Gosbank'; EZh, August 28, 1936. For an earlier report on Gosbank inefficiency, see K. Arsen'ev, 'Why is Gosbank Silent?', EZh, July 20, 1936, which strongly reproves the board of the bank for failing to use loans to encourage the mass production of consumer goods.

state in order to finance the terrorist bandit group of Trotskyites and Zinovievites', and condemned the party group for supporting him during the exchange of party cards in 1935.⁹¹ The author of the newspaper article reported that the meeting of the party group held to discuss a critical resolution from the Moscow party lasted four days, August 17–20, but failed to expel two associates of Arkus until the last day. The crucial point in the report was its criticism of the conduct of Mar'yasin, who was evidently summoned back to Gosbank to attend the meeting:

Cde. Mar'yasin spoke at the meeting. However, he did not find appropriate words to fully recognise his guilt, to recognise the fact that, as he was closely associated with and warmly connected with Arkus, that it was his lack of vigilance more than anyone else's, which was blunted, that he bears full responsibility for the atmosphere of lack of control which surrounded Arkus, a traitor and an agent of the counter-revolutionary Trotskyite–Zinovievite gang.⁹²

Mar'yasin was arrested on December 23, 1936, and sentenced to death on September 10, 1937.

Meanwhile, compromising evidence had been collected against Pyatakov since July. He was arrested on September 12, and simultaneously dismissed from his post in Narkomtyazhprom.⁹³ In terms of practical leadership Pyatakov was by far the most important person, apart from Ordzhonikidze, both in Vesenkha and in its successor Narkomtyazhprom; he had been first deputy chairman since July 1934. This dramatic act was not reported in the press, but soon became widely known among economic officials.

Pyatakov's arrest was followed eleven days later by an event fortunate for those anxious to find evidence of a terrorist plot: an explosion in the Kemerovo coal mine in Siberia, in which ten miners were

⁹¹ This report, and the events it describes, were evidently a reaction to the attack on Arkus, and on Tumanov, head of Prombank, on the same grounds, by Reingold in his evidence presented for the Zinoviev–Kamenev trial (see SKP, 637 – Kaganovich to Stalin, August 20).

⁹² EZh, August 28, 1936. The principal charge against Arkus in this report was that he had met Kamenev in 1932; Arkus explained this as a 'casual, holiday' occasion.

⁹³ Testimony implicating Pyatakov as 'leader of the Ukrainian terrorist centre' had been obtained from one of those arrested during the preparations for the Zinoviev–Kamenev trial (see SKP, 681, Kaganovich to Stalin, August 17).

killed.⁹⁴ Two days later, on September 25, Yezhov replaced Yagoda as head of the NKVD, and in due course Kemerovo became the pretext for a well-publicised trial of a 'counter-revolutionary Trotskyite wrecking group', opened in Novosibirsk on November 20.⁹⁵

The Kemerovo trial was the most prominent event in the harrying and persecution of economic officials in the last weeks of 1936. Of the 823 senior officials holding posts on the nomenclature of Narkomtyazhprom, 11 were dismissed in the spring and summer of 1936, but as many as 44 in the last weeks of the year.⁹⁶ Among the victims were Rataichak, head of the chemical industry, Glebov-Avilov, director of Rostsel'mash, and S. M. Frankfurt, the famous leader of the Kuzbass construction.⁹⁷ Narkomtyazhprom was not the only commissariat to be affected.⁹⁸ Yu. A. Lifshits, prominent scourge of the 'limit theory', was dismissed from the deputy chairmanship of Narkomput' and arrested. By the end of 1936 bewilderment and fear were widespread among economic officials.

In public the year ended with the adoption of the new Soviet constitution, accompanied by enormous publicity and supported by praise for the new flourishing of democracy and freedom. But simultaneously the year ended with an event about which nothing was known publicly until after the collapse of the USSR. In December 1936 at a plenum of the party central committee Bukharin and Rykov were accused of the basest treachery. Stalin, evidently dissatisfied because they continued to insist on their innocence, proposed that a decision about their case should be postponed to the following plenum.⁹⁹ The Soviet political scene had strikingly changed as compared with a year earlier. The December

⁹⁴ This event and its consequences are carefully analysed in W. Z. Goldman (2007), *Terror and Democracy in the Age of Stalin*, 97–104.

⁹⁵ On November 16 the Politburo ruled that the trial was to be conducted by the Supreme Court on circuit, headed by the notorious Ulrikh, and that all the accused, including a German citizen, were to be sentenced to death (RGASPI, 17/162/20, art. 231).

⁹⁶ Khlevnyuk (1993), 87–8. Nine of the 11 and 34 of the 44 were arrested.

⁹⁷ For Glebov-Avilov and Frankfurt, see index to vol. 4.

⁹⁸ Lobov, People's Commissar of the Timber Industry, was dismissed, though at the time this was presented as due to the failure of the industry rather than to his treachery.

⁹⁹ For this plenum, see *Izvestiya TsK*, 7, 1989, and Getty and Naumov, eds (1999), 300–30.

1935 plenum was quite fully reported, celebrating the triumph of Stakhanovism, and almost nothing was said about the continued existence of internal enemies. This calm public atmosphere continued to prevail in January 1936, when TsIK met to consider the annual economic plan and state budget. But by December 1936 the Soviet Union was about to enter upon the darkest two years of its history.

CHAPTER ELEVEN

1936: 'THE STAKHANOVITE YEAR'

The extremely rapid development of industry in 1936 was equalled only by its performance in the mid- and late-1920s. Growth in the 1920s largely depended on restoration of pre-revolutionary capital. In the mid-1930s it also largely resulted from the use of existing capital – the bringing into use and partial completion of the vast investments undertaken in the first five-year plan. In 1934–36, the rate of growth of industry increased annually, and reached its pre-war peak in 1936. This success was celebrated by the publication of an unprecedented number of informative economic surveys, month by month and quarter by quarter. These reports, largely written by economists already highly regarded in the 1920s, were remarkable for a degree of frankness which had temporarily disappeared in the early 1930s, and was not to be resumed until after Stalin's death.

(A) THE ADVANCE ACCELERATES, JANUARY–JUNE 1936

Normally, a temporary decline took place in the January–March quarter, due partly to the winter conditions and partly to a lull following the intense efforts to achieve the annual plan, a universal feature of the final quarter of every year. In January–March 1936, however, large-scale production actually exceeded the level of October–December 1935 by 1.4 per cent, even though the launching of the Stakhanov movement in that quarter had resulted in a particularly rapid growth of production. This remarkable result meant that production was 32.1 per cent greater than in January–March 1935,¹ and exceeded the quarterly plan by 3–5 per cent.²

In January–March 1936 Narkomtyazhprom industry was more successful than industry as a whole: gross production was 6.1 per cent

¹ EZh, January 22, 1936.

² Estimated from data in quarterly plan (RGASPI, 17/3/974, dated December 30, 1935), which stated that the plan for the first quarter amounted to 23.5–24 per cent of the annual plan for Union and local industry (these and later figures excluded cooperative industry, but this was a very small proportion of the total).

greater than in October–December 1935.³ Narkomtyazhprom reached or exceeded the plan in many major industries, including electric power, oil, iron and steel and non-ferrous metals, and chemicals and cement. Oil and non-ferrous metals had lagged behind the plan in previous years. The machine-building and metalworking sector also increased rapidly. The most alarming lag was in coal, which had pioneered the Stakhanovite movement in the previous quarter: in January–March 1936 coal production was 5.9 per cent *less* than in the previous quarter (see pp. 324–6 below).⁴ The growth of industry as a whole was also restricted by the poor performance of the timber and light industries.

The April–June quarter, allowing for seasonal factors, was even more successful. The quarterly plan for Union and local industry proposed that production should increase by as much as 35 per cent as compared with the same period of 1935, far exceeding the rate of growth stipulated in the annual plan.⁵ But even the ambitious quarterly plan was exceeded: production reached 36.3 per cent above the April–June 1935 level. The production of consumer goods increased much more rapidly than in the first quarter, almost equalling the rate of growth of producer goods.⁶

The detailed reports in physical terms in the bulletins of Gosplan showed that this growth was general throughout nearly the whole of industry. For 107 items listed, only 18 declined in the first six months of 1936 as compared with the first six months of 1935, and 39 increased by 30 per cent or more.⁷

This rapid growth largely depended on increases in labour productivity. In the five months January–May, labour productivity increased by 25.9 per cent as compared with the same months of 1935, and the industrial labour force by only 7.3 per cent.⁸

The performance of the railways was also impressive, clearly a result of the massive investment in rolling stock and freight in 1934

³ P, April 15, 1936 (M. Tsaguriya).

⁴ For production in physical terms, see *Operativnaya svodka: A. Proizvodstvo 1936* (1937); for machine-building and metalworking, see *Osnovnye pokazateli*, January and January–June 1937, 3.

⁵ RGASPI, 17/3/975. 65–66, 197–207 (dated March 7).

⁶ Producer goods: 37.5 per cent of April–June 1935, consumer goods 34.5 per cent (all large-scale industry, EZh, January 22, 1937).

⁷ See Davies (2006), 17.

⁸ P, July 27, 1936 (Mendel'son). In January–March the equivalent figures were 25.1 and 7.1 per cent (P, May 26, 1936 (Mendel'son)).

and especially in 1935, together with the efficiency drive which culminated in the Stakhanov movement in the last three months of 1935 (see p. 217 above). In January–June 1936 the average daily loading of freight exceeded the January–June 1935 average by 36 per cent, and the average number of wagons loaded per day reached 89,900 in June. This was unprecedented. The distance covered per goods train per day and the average speed of goods trains also increased substantially.⁹

The growth of productivity partly depended on changes in wage arrangements following the conference on Stakhanovism in the previous November. During the first months of 1936 the norms of output were successfully increased. These changes and their consequences for wages and costs are discussed below (pp. 353–4 and 358).

At the micro-level, Stakhanovism undoubtedly led to significant improvements in various industrial practices. But the advantages were partly or wholly cancelled out by the decline in the regularity with which supplies were available, and in production planning generally. There was an immediate increase in industrial accidents. Vyshinsky, Chief Procurator of the USSR, addressed a letter to Stalin and Chubar' pointing out that in the first three months of 1936 accidents in the coal and iron and steel industries were substantially higher than in the same months of 1935. He proposed the establishment of a government commission to study the problem.¹⁰ In June 1936 the well-known industrialist S. P. Birman complained that accidents and damage to furnaces had increased in April–May as a result of the 'drive for quantity' and the bad treatment of equipment.¹¹ The Utopian hopes of Stalin, Molotov and Ordzhonikidze that production would double within a couple of years were gainsaid by experience even before the purges disrupted the industrial economy.

Surprisingly, in view of the disastrous harvest which followed later in 1936, in the first six months of 1936 the agricultural situation also seemed favourable. These months were the last six months of the agricultural year July 1935 to June 1936, in which the harvest had

⁹ *Osnovnye pokazateli*, July 1936, 68, 72–4. See also Rees (1995), 156. The number of wagons is measured in 2-axle units.

¹⁰ GARF, 8131/37/72, 237–239 (no date). Accidents in the coal industry of the Donbass increased from 28,390 to 31,864 (deaths increased from 235 to 261); accidents in the iron and steel industry of the Donbass and Dnepropetrovsk increased from 7,167 to 7,799.

¹¹ *Sovet pri narodnom* (1936).

been good. In the autumn of 1935 the weather was at first warmer than usual, and the warmer weather then continued until October 1935 which made a longer sowing period possible. Eventually the autumn sowings for the 1936 harvest took place earlier than in the previous two years and were somewhat larger (see Table 25).

The results of the spring sowings in 1936 were much more contradictory. At first the prospects seemed promising. The first sowings up to the end of March were higher than in the previous three years. In a memorandum prepared by Mezhlauk dated April 10, 1936, he exaggeratedly stated that 'most districts of the USSR are approaching the completion of the spring sowing'. He pointed out that by March 31 98 per cent of the planned repair of tractors had been carried out in the People's Commissariat of Agriculture (Narkomzem), and 99 per cent in the People's Commissariat for State Farms.¹² But the colder temperatures in April delayed the sowings and hindered the early establishment of the grain. Throughout April, until the last five days, sowings were less than they had been in the previous two years, and the gap was closed only by very high levels of sowing from the last few days of April onwards (see Table 25). This was not necessarily a disadvantage. In 1933 the spring sowings had been even more delayed, but a good harvest was achieved. In 1936 the leaders maintained that the improved quality of landworking, together with greater mechanisation, would compensate for any delays. Some confirmation of this was provided by a memorandum to Vyshinsky from the agricultural department of the RSFSR procuracy, which reported that if the data for 1936 about prosecutions connected with the spring sowing were compared with the previous year 'a sharp reduction is very obvious':

In 1935 the number found guilty in cases connected with the spring sowing in the RSFSR (excluding the autonomous republics) was 44,188 (sentences put into force).

This year up to June 1 the people's courts found 7,218 guilty (excluding the autonomous republics) (sentences put into force).

The figures for those found guilty in 1934 had been even higher.¹³ The only exception in 1936 was West Siberia. But bad weather in some other areas undoubtedly had harmful results. In Stavropol' and

¹² GARF, 5446/29/48, 11.

¹³ TSD iv (2002), 811–17 (prepared early August 1936).

other districts of the North Caucasus the dry winds (*sukhovei*) were protracted. According to telegrams from the North Caucasus NKVD, substantial autumn 1935 sowings were ruined and had to be resown:

On May 14 and 15 the winds blew with their earlier strength. There was no rain. The quantity of sown area which was destroyed increased in recent days ... In the districts most suffering from the winds 50 to 70 per cent of the autumn sowings were destroyed.¹⁴

On the other hand, some reports from regional and republican sections of the NKVD attributed delays in sowing, and poor quality of sowing, to faults that could have been avoided. In Ukraine in some cases tractors were not repaired in time or supplied with fuel, horses were undernourished and peasants failed to work intensively enough.¹⁵

The favourable position in agriculture after the 1935 harvest, and on the retail market generally, was reflected in the continual decline in prices on the kolkhoz market. The summary index numbers from the surveys carried out in 95 towns for 32 food products sold on the urban kolkhoz markets in June 1936 are as follows (June 1935 = 100)¹⁶:

All 32 goods	80.6
5 grain products	71.7
4 fodder products	99.3
Potatoes	59.5
4 vegetables	99.1
Vegetable oil	79.1
17 livestock and dairy products	80.7

With capital investment, as usual, the position was more complicated. The main building season was of course in the summer and

¹⁴ *Sovetskaya derevnya*, iv (2012), 262–4 (telegrams of May 19, 1936, and later).

¹⁵ *Sovetskaya derevnya*, iv (2012), 252–6 (report of Ukrainian NKVD dated April 5).

¹⁶ *Osnovnye pokazateli*, June 1936, 271 (preliminary figures). Similar results appear from the specific prices given for 13 products in urban kolkhoz markets in 13 towns (*ibid.* 279–86). Most sales were of meat and dairy products (according to the data for 28 towns, 69.3 per cent of total sales in April–June 1935 and 71.4 per cent in April–June 1936); sales of grain products were quite small (5 per cent of total sales in April–June 1935 and 2.5 per cent in April–June 1936). Total sales in April–June 1936 were 29.3 per cent greater than in April–June 1935 (*ibid.* 256, 271).

autumn; investment in January–June almost always amounted to no more than 30–40 per cent of annual investment. In 1936 investment got off to a particularly slow start, partly as a result of new regulations adopted at the beginning of the year which tightened up the requirements for the plans and estimates needed before investment in a project was authorised.¹⁷ Even so, for the projects for which returns were available, investment by July 1, 1936, was reported at 32.9 per cent of the ambitious annual plan. This may be compared with the 37.4 per cent of the more modest 1935 annual plan which had been achieved by July 1, 1935. If these partial returns are representative, the increase in investment in the first six months of 1936 as compared with the same period of 1935 amounted in terms of current prices to about 24 per cent.¹⁸ As in 1935 as a whole, the supply of building materials and capital equipment substantially increased, and these resources were used with a reduced number of building workers.¹⁹

The financial results in the first six months of 1936 were also on the whole favourable. But the Politburo continued to be concerned about the level of inflation. On April 29, 1936, it decided to cut budgetary expenditure by reducing the interest on mass loans from the population from 8–10 to only 4 per cent, and to extend the length of the loans from 10 to 20 years; all previous loans were to be converted to these less favourable terms.²⁰ Stalin, anxious about the indignation which these measures would arouse among the 50 million loan holders, decided to report the matter to the plenum of the party central committee before a public announcement. His brief statement to the plenum on June 3 was quite frank:

This is a serious matter, comrades, which cannot be postponed. It is a result of the need for money. As you are well aware, we spend an alarming amount of money on things which cannot be delayed. Expenditure is growing at a rapid rate. Much money has been spent, and is being spent, on such matters as building schools, teachers' pay,

¹⁷ See Davies and Khlevnyuk (2002), 882–4.

¹⁸ *Osnovnye pokazateli*, July 1935, 84, and July 1936, 101.

¹⁹ See *Osnovnye pokazateli*, June 1936, 14–15, and December 1936, 209.

²⁰ RGASPI, 17/162/19, 160–161 (art. 75). The decision was not promulgated as a decree of TsIK and Sovnarkom until July 1 (SZ, 1936, art. 329: see also art. 331 – supplementary Sovnarkom decree of same date).

urban improvement, irrigation and afforestation of a number of parts of the country, and constructing canals.

Money is being spent on defence, and even more will be spent in future. Defence must be developed as required, both in quality and especially in quantity. We do not yet have a navy, and a new one must be established. This is a very serious and expensive matter.

Then it must be borne in mind that in 1937 we will begin a mass reduction of the prices of food products and consumer goods. A commission is working under cde. Molotov ... There is already a target of reducing prices by 10, 20 and in some cases 30%. This circumstance will also increase the tension on our state budget.

That is the situation, comrades.²¹

On May 29, in the course of these proceedings, Grin'ko and Mar'yasin sent a joint memorandum to Stalin and Molotov warning that currency issue was exceeding the plan in the April–June quarter, and calling on the government departments concerned with internal trade to increase supplies to the population in order to absorb the excess cash in circulation.²²

However, on July 16 Grin'ko, in a further memorandum to Stalin, was more optimistic. He estimated that in 1936 as a whole the plans for both budgetary revenue and budgetary expenditure would be exceeded; he reported that the currency issue planned for the year would take place in full, but did not suggest that the issue would exceed the plan.²³ Then on August 23 Narkomfin sent a further memorandum to Kaganovich and Chubar' which reported an unusually healthy state of public finance. Its figures showed that the growth of currency issue in January–June 1936 was less rapid than in the same period of 1935. The authors of the memorandum estimated that the annual currency plan would not be exceeded.²⁴ This would have been a most unusual achievement ... (for the plan actually adopted for October–December 1936 and the results for 1936, see pp. 314–16 below).

²¹ RGASPI, 17/2/572, 34ob, 35.

²² GARF, 5446/28/9, 138–41.

²³ GARF, 5446/26/61, 275–268.

²⁴ GARF, 5446/26/64, 142–138, and supplementary memorandum on l. 148. This is the archival file which also contains Kvirring's memorandum of August 22 (see pp. 311–12 below).

(B) STAKHANOVISM AND THE ECONOMY,
JANUARY–AUGUST 1936: THE CAMPAIGN AGAINST
SABOTAGE TEMPORARILY WITHDRAWN

During these months of economic expansion, dramatic changes took place in the extent to which class enemies were blamed for present economic difficulties. In these months several industries were performing badly, particularly the coal industry (see pp. 324–6 below). At the end of 1935 and in the first weeks of 1936 such defects were treated as a failure of the Stakhanov movement due in large part to sabotage by class enemies.²⁵ Early in 1936 the weak spots in Soviet industry were thoroughly investigated. In February and March the party control commission, which was headed by Yezhov, inspected the Sverdlovsk region in the Urals, with particular attention to the failure of the plan for copper smelting, coal and timber. Following this investigation, officials of the industrial department of the central committee reported to Andreev, its head, that the defects were due not only to accidents and hold-ups but also to the ‘unjustified repression of engineering and technical personnel’.²⁶ Then on March 20 the situation in the region was discussed by the Orgburo of the central committee, with the participation of Ordzhonikidze, Andreev and Yezhov. Ordzhonikidze made only one brief remark on sabotage: ‘any attempts to sabotage the Stakhanov movement will be punished most decisively by the party’. The rest of his speech, which occupies eleven pages in the archives, was devoted to criticism in friendly terms of the conservatism of technical personnel, and of the complacency which had followed the previous successes. Yezhov and Andreev, who became two of the most vicious enforcers of the Great Purge under instructions from Stalin, made no reference whatsoever to sabotage, wrecking or class enemies in their speeches; nor did the resolution of the Orgburo.²⁷

These developments all took place behind the scenes. Then on June 2, 1936, *Pravda* published a speech by Postyshev in which he criticised Ukrainian officials for unjustified repressions, and on June 7 the newspaper published an editorial entitled ‘Lesson of the Donbass (*Urok Donbassa*)’. This attributed the failure of the coal plan

²⁵ See Davies and Khlevnyuk (2002), 882–4.

²⁶ For these developments see *ibid.*, 884–5.

²⁷ For these proceedings, see RGASPI, 17/114/741, 103–113 (Ordzhonikidze), 114–115 (Andreev), 116–117 (Andreev), 53–56 (resolution).

not to wrecking but to excessive record breaking conducted for show and to the unjustified persecution of engineers and technicians.

Ordzhonikidze was not the only member of the Politburo to reject the view that sabotage was widespread. In April Kaganovich had taken a similar line in relation to the railways, and at a conference on July 30, a day after the secret central committee letter on the treachery of Zinoviev and Kamenev, he declared that there were few enemies on the railways, and that repression was not the way forward.²⁸

The new deal for the managers and engineers continued even during and after the Zinoviev–Kamenev trial. After the trial, on August 31, a central committee directive was sent to regional party secretaries which read as follows:

Recently, in a number of party organisations, responsible officials appointed by the central committee, and in particular directors of enterprises, have been dismissed from their posts and expelled from the party without the knowledge and agreement of the central committee. In this connection the central committee must make it clear that such actions by local party organisations are incorrect.

The directive insisted that all such cases must be referred to the central committee with supporting material.²⁹

The directive was prepared in draft by Kaganovich and Yezhov, and sent to Stalin on vacation by ciphered telegram on August 29. The telegram to Stalin stated that the directive had been prepared 'in conformity with your wishes', so evidently Stalin had been persuaded – for the moment – that further repression of senior managers was unwise. The same telegram to Stalin included a draft Politburo decision prepared by Kaganovich and Yezhov which criticised *Izvestiya* for publishing an item entitled 'An Exposed Enemy'. This reported that the party organisation of the 'Magnezit' factory, Chelyabinsk region, had expelled the director of the factory from the party for assisting and protecting Dreitser, who had been executed as a Trotskyite terrorist. The draft Politburo decision proposed that the decision of the Magnezit party should be annulled, that the Chelyabinsk newspaper which published this decision without checking it should be reprimanded, that the Chelyabinsk correspondent of *Izvestiya* should be dismissed for supplying *Izvestiya* with information

²⁸ See Rees (1995), 140–1, 148. For the central committee letter, see below.

²⁹ APRE, 3/22/150, 129.

from the local press which he had not checked, and that *Izvestiya* should publish the proposed Politburo decision and a statement from the editors of the newspaper that the offending item should not have been published.³⁰ On the following day, August 30, Stalin approved this draft, and on August 31 it was adopted by the Politburo.³¹ On September 1 it was published in the press.

(C) THE COUNCIL OF NARKOMTYAZHPROM,
JUNE 25–29, 1936

The June Council was the last major meeting of Narkomtyazhprom before the death of Ordzhonikidze, and the last public hard-hitting and fairly frank discussion of industrial faults and successes until the industrial conference called by Bulganin in July 1955.³² It was almost entirely free of accusations of sabotage, wrecking and treachery. In his concluding address Ordzhonikidze openly defended the specialists:

Many of the engineers and managers who have spoken here have recognised that so far they have not taken the lead [in the Stakhanov movement]. Why? Various explanations have been given. To give the explanation that engineering and technical personnel are saboteurs is nonsense. What saboteurs are these? In the 19 years of Soviet power we have educated engineers and technicians in our schools and higher education establishments, we have produced over 100 thousand engineers and the same number of technicians. If all of them, and the old engineers whom we have re-educated, turned out to be saboteurs in 1936, congratulate yourself on such a success. What saboteurs are these? They are not saboteurs, but good people, our sons, our brothers and our comrades, wholly and fully in favour of Soviet power. They will die at the front for Soviet power if that's needed. (*Stormy and prolonged applause.*)³³

This line was also taken by other speakers at the Council. The head of the coal trust Stalinugol', A. M. Khachatur'yants, declared

³⁰ RGASPI, 558/11/93, 135–136; 81/3/101, 77–79. The original item appeared in *Izvestiya* on August 29, so Kaganovich was quick off the mark.

³¹ RGASPI, 558/11/93, 126; 17/3/980, 79.

³² For this conference see SS, vii (1956), 308–31 (Davies).

³³ ZI, July 5, 1936.

that the main cause of the failure of its production plan was that 'the command staff does not work intensively as a result of the accusations which are indiscriminately made against them ... Instead of thinking about what innovations to make ... the engineers, fearing to be placed in the position of saboteurs or conservatives, do everything by the letter of the law'.³⁴ In a major speech Pyatakov, still at this time Ordzhonikidze's first deputy, emphasised that 'they are *our* engineers, the flesh and blood of our working class ... The same with the old engineers. I think I am not mistaken when I say that at the present time the overwhelming majority of the old engineers are striding along in friendly comradeship with the mass of the working class.' According to Pyatakov, if the engineers had not kept up with the Stakhanov movement so far, the explanation was that they had been trained in the technology of capitalist society, and now needed to master socialist technology, in which the more advanced workers were ahead of the engineers.³⁵ M. I. Ul'yanova, Lenin's sister, responsible for promoting inventions by rank-and-file workers, complained about the treatment of five workers who had been dismissed 'for wrecking'; this charge had made it impossible for them to find jobs elsewhere. (Eventually they were found innocent, and the pay they had lost was restored.)³⁶

The Council heard reports from senior industrial officials, directors of major factories and leading Stakhanovites. The contrast between the most successful and the lagging industries was particularly striking. Ordzhonikidze spoke of 'the fine traditions of our metallurgists, who at every conference, at every meeting of the Council, do not let each other rest, criticise each other, compete with each other, and acting together rise to the leading place in heavy industry. (*Applause.*)' The machine-building industry was in a similar favourable position. Great attention was also devoted to the lagging industries, especially coal, oil and non-ferrous metals. M. M. Kaganovich, recently put in charge of the rapidly expanding aircraft industry, gave a lengthy report claiming that the aircraft industry was the technically most advanced and complex industry, and that Soviet record flights had brought great prestige to the Soviet Union. He claimed that 'there is no country in Europe, or in America, where aircraft factories as large as in the Soviet Union'. At the same time, in the

³⁴ ZI, June 28, 1936.

³⁵ ZI, June 30, 1936.

³⁶ ZI, July 4, 1936.

spirit of the meeting, he strongly criticised the weaknesses in the industry: it had as many faults as in machine building as a whole, and aircraft designers until recently had tended to be isolated from practical technology and the factories.³⁷

The general message of the Council was that present successes must be followed by a continuing further upsurge. According to Pyatakov:

We must not in any way, not for a single second, say that the most important things have already been done, and that all that has to be done is to carry out corrections and improvements.

On the contrary I consider that what is most important in the transition of industry up to the level of socialist labour productivity is still ahead of us, that we are still at the very beginning of advancing to this level.

The first section of Ordzhonikidze's address on the final day was appropriately entitled 'Do Not Settle Down with what has Already Been Achieved', and he stressed what had been a major theme of the meeting: the need to recognise that Soviet industry still had a long way to go before it caught up with the advanced capitalist countries. In the section of his speech entitled 'On the Slogan "Catch up and Overtake"', he strongly criticised speakers who had suggested that in important respects Soviet industry had already reached United States' levels. D. Kovalev, director of the Karabash copper-smelting factory, claimed that 'our factory can compete with the best enrichment factories in America', but Ordzhonikidze indignantly replied that copper yields in the United States were far higher than in the Karabash factory:

Comrade Kovalev is working twice as badly as America ... Where did this dream that you have already overtaken America come from?
(*Laughter*)

Comrade Kovalev, if you want to overtake America, you must study it first, so as to exceed the level you reached previously, without believing that you are already overtaking America.³⁸

Other speakers equally emphasised that overtaking the United States – and capitalist countries generally – was a huge task.

³⁷ ZI, June 30, 1936.

³⁸ ZI, June 30, July 5, 1936.

A. Pudalov, head of the technical council of Narkomtyazhprom, firmly pointed out:

The capitalist countries are not waiting – and will not wait – for us to catch up. They are moving ahead; they are mastering an increasing number of technical issues.

He contrasted conservative Soviet machine-building factories with the factories in Western Europe, where, he claimed, the designer of new machines was placed at the centre of factory development, and factory laboratories played a key role.³⁹

The crucial problem looming over plans for the further growth of industry was of course the extremely limited availability of investment for major heavy industries. Increasing resources were allocated to education, the light and food industries, and to defence. Typically, Zavenyagin, director of the Magnitogorsk works, complained that his works had not received the 17 million rubles planned for its development, and that 'this is paralysing our work; we cannot buy anything, and lack the barest necessities'.⁴⁰ Ordzhonikidze dealt with such complaints by praising a machine-tool factory which had agreed to fulfil its programme without the investment which it had been allocated: 'this is excellent, to produce more machine tools with the same equipment, and using the same factory floor space; they don't press for more investment, like very many managements are inclined to do'. Pudalov drew attention to the 'colossal reserves' available due to the under-utilisation of existing machines, and contemptuously commented that in these circumstances 'no one will give them the right to speak about increasing investment in machine building'.

The meeting accordingly devoted most of its attention to securing increased production with the existing capacity. Following the decisions at the end of 1935 on increasing norms, delegates at the Council reported that the increased output norms adopted by most heavy industries were being successfully fulfilled by the majority of workers. In adopting new output norms, each industry had also revised its estimate of the capacity of existing equipment and plant. Gurevich, head of Glavmetal, pointed out that his industry, which had produced 31,300 tons of crude steel a day in 1935, was

³⁹ ZI, June 28, 1936 (A. Pudalov). He cited the Khar'kov tractor factory as a successful exception.

⁴⁰ ZI, July 3, 1936.

scheduled in the 1936 plan to increase this to 43,400 tons. However, the industry had now revised its plans to as much as 50,000 tons a day. This new figure had not yet been achieved – but should itself be seen as a step towards further progress. The full production capacity of the industry, revised in view of the experience of the Stakhanov movement, was now estimated at 69,000 tons a day. Similarly Rataichak, head of Glavkhim, explained that the capacity for producing artificial fertilisers from existing plant had previously been estimated at 1.1 million tons, but it was now planned to reach 2 million tons, and in 1937 could reach the five-year plan target without additional plant.⁴¹

In the course of 1936 in a number of industries the anticipated increase in production was achieved. But rapid expansion which depended on already existing capacity carried a price. In several industries the substantial growth at the end of 1935 and the beginning of 1936 had been achieved by delaying or skimping repairs. The Council was told that in the iron and steel industry, for example, production declined in April and May, partly because repairs had not been sufficient, and partly because the adaptation of the furnaces to more intensive production had not been properly prepared – in one case American practice was adopted without the necessary tests.⁴² At ZiM, the two leading Stakhanovites complained that they had been unable to maintain the productivity they had previously achieved. According to A. Busygin, insufficient metal was supplied and his hammer was not properly repaired, while A. Faustov reported that his hammer was not powerful enough. The technical director of ZiM explained that factory efforts had been concentrated on preparation for the production of the new M-1 engine, and as a result the new large repair shop had not been completed. The head of the forging shop in which Busygin worked insisted that the situation was better than that described by Busygin, but his own evidence revealed that the main problem was insufficient capacity. He acknowledged that he had been unable to stop the hammer while repairs took place because of the urgent need to produce gears; the stock of gears was not sufficient to tide them over while the repair took place.⁴³

⁴¹ ZI, July 5, 1936.

⁴² See S. Birman (director of the Petrovskii iron and steel works), and A. Gurevich (head of Glavmetal), ZI, July 3, June 28, 1936.

⁴³ ZI, July 5, 1936; A. Ivanov was the technical director and B. Sokolinskii the head of the forging shop.

In spite of these deficiencies, most industries resumed the growth in production from June onwards. How far this pace could be maintained without major investment in new plant was a matter for the future.

(D) MILD DECELERATION, JULY–DECEMBER 1936

A particularly optimistic quarterly plan for July–September was confidently approved on June 9. While the Politburo decisions on the previous two quarterly plans had been expressed in the form of 'directives' for the compilation of the plan, on June 9 the Politburo firmly approved the plan as a decree of the party central committee and Sovnarkom. Even more ambitiously than in the previous quarter, it decided that the production of Union and local industry should exceed the July–September 1935 level by as much as 42 per cent, far above the annual plan target of 23 per cent.⁴⁴ However, it singled out four branches of heavy industry which must receive special attention because their results for January–June had been 'clearly unsatisfactory'. Coal production had declined ever since February. Oil had failed to reach the plan, but oil consumption had nevertheless been excessive, and must be reduced by one-eighth in the July–September quarter. The production of first-grade rails had also lagged, and must be increased so that 75 per cent of the annual plan was fulfilled by September 30. The production of mass consumer goods by heavy industry had been 'completely unsatisfactory'. The decree also strongly criticised the performance of the timber industry, and rejected the draft quarterly plan for light industry, which proposed a temporary reduction in production.

It soon became clear that it would be extremely difficult to fulfil this ambitious plan. Reports on the performance of heavy industry during July noted that labour productivity had increased less rapidly than in the previous six months, and that industrial production, which normally declined slightly in July each year, had fallen much more rapidly in July 1936.⁴⁵ The production of key items was substantially lower than in June. These included not only the persistent delinquents coal and oil, but also crude and rolled steel, and machine

⁴⁴ RGASPI, 17/3/978, 132–150.

⁴⁵ Producer goods' output declined by 12 per cent in July 1936 but only 2 per cent in July 1935 (*Osnovnye pokazateli*, June and January–June 1973, 3).

building and metalworking.⁴⁶ A further report suggested that 'the extreme heat (*zhara*) which seized a large part of the USSR on the last days of July and the beginning of August could perhaps to some extent have reduced labour productivity'.⁴⁷

The situation improved in August and particularly in September, when large-scale industrial production exceeded the June level by 9.5 per cent. The production of both producer and consumer goods increased.⁴⁸ Production of coal rose slightly for the first time since February, but production of oil continued to decline. In the quarter as a whole production slightly exceeded the April–June level.⁴⁹ But the increase as compared with July–September 1935, 33.2 per cent, while exceeding the annual plan, was less than in the previous two quarters and far less than proposed in the quarterly plan.⁵⁰

Meanwhile, the preparation of the quarterly plan for October–December was under way. The immediate context was the poor performance in July. On August 22, Kvirin, deputy head of Gosplan, sent a memorandum to Kaganovich and Chubar' (deputising for Stalin and Molotov) attaching a draft central committee and Sovnarkom decree on the plan. In the memorandum he pointed out that the plans for railway transport and internal trade were being successfully fulfilled, but strongly criticised the performance of industry:

Fulfilment of the national-economic plan in the third quarter of this year is unsatisfactory for a number of the most important industries. In total, the output of the USSR People's Commissariats and the People's Commissariats for Local Industry in July ... declined in comparison with the production level in June by 5.3 per cent.

The draft decree proposed that the production of Union and local industry in October–December should increase by 17.3 per cent as compared with the *plan* for July–September; Kvirin emphasised that

⁴⁶ ZI, August 5, 14, 1936.

⁴⁷ ZI, August 16, 1936.

⁴⁸ Monthly industrial production as compared with the previous month was as follows: July –9.5 per cent; August +7.3; September +12.8 (*Osnovnye pokazateli*, June and January–June 1936, 3). The results for July–September were reported and discussed in ZI, October 5, November 15, 1936, and in EZh, October 22, 1936 (Kronrod).

⁴⁹ EZh, January 22, 1937.

⁵⁰ *Ibid.*

this would enable annual production to amount to 109 per cent of the 1936 plan.⁵¹

This presentation by Gosplan to the political authorities carefully refrained from mentioning that the plan for industry involved some deceleration in the rate of growth as compared with the first nine months of 1936. The proposed increase of 17.3 per cent was much lower than the actual increase of 28.4 per cent achieved in October–December 1935. If achieved it would have resulted in industrial production which exceeded the October–December quarter of 1935 by approximately 31 per cent.⁵²

The draft plan submitted by Kviring also proposed that capital investment in the quarter should amount to 7,574.6 million rubles. This figure, which was presented without comment, amounted to only 21.6 per cent of the annual plan. In view of the lag of investment in the first nine months, it implicitly recognised that the annual investment plan would not be achieved.

The draft decree of August 22 was duly reviewed by the Politburo, and their conclusions were reported to Stalin by Kaganovich on September 2.⁵³ Kaganovich's telegram to Stalin stated that 'we discussed the question of the national-economic plan for the fourth quarter with the People's Commissariats', and listed the key planned figures. Most of these, including the plan for industrial production, were the same as in Kviring's memorandum. The railway and retail trade plans were reduced slightly.⁵⁴ The only important change was an increase in the capital investment plan for the quarter, from 7574.6 million rubles in Kviring's document to 7,909 million rubles. This amounted to 22.6 per cent of the annual plan, so was only a partial correction to the shortfall in the previous nine months.⁵⁵

Stalin accepted the plan without comment, including the figure for capital investment. All these figures, and the text accompanying them, were incorporated in a Politburo resolution on the following

⁵¹ For the memorandum and draft plan, see GARF, 5446/26/64, 133–122.

⁵² We have assumed that cooperative industry production in October–December 1935 was about 1,200 million rubles.

⁵³ SKP, 658–9.

⁵⁴ The number of goods wagons per day was planned at 91,000 instead of 92,000; freight carried at 131 instead of 136 million tons; and retail trade at 28,000 instead of 28,500 million rubles.

⁵⁵ SKP, 658–9.

day, September 3.⁵⁶ Kaganovich's telegram contained a typing error: retail trade was given as 28 *million* rubles instead of the 28.5 *million* (thousand million) rubles in the Kviring document. The error was not noticed by Stalin and found its way into the Politburo resolution. This correspondence with Kaganovich is strong evidence that Stalin, preoccupied by the struggle against alleged enemies, was not seriously concerned with the plan at this time.

The failure to fulfil the investment plan was confirmed by a memorandum from Mezhlauk on behalf of Gosplan to Sovnarkom on October 17. He pointed out that the investment plan had now reached 36,100 million rubles as compared with the plan of 32,400 approved by TsIK at the beginning of the year, and 60 per cent greater than the actual fulfilment in 1935. But only 47.2 per cent of this increased plan had been carried out in the first eight months of 1936, as compared with 54.8 per cent in the first eight months of 1935, and the 70 per cent which would be achieved 'if construction followed its normal course'.⁵⁷

The relatively modest production plan for the fourth quarter also proved very difficult to achieve. Normally industrial production increased in each of the three months October, November and December, even though November was a short month.⁵⁸ In October production increased by 7.4 per cent. A survey of the month in the industrial newspaper showed that production increased in nearly all Narkomtyazhprom industries. Even the usually lagging industries increased production, coal by 6.9 per cent and oil by 5 per cent (though both industries failed to reach their monthly plan).⁵⁹ But in November the production of heavy industry, and industrial production as a whole, increased only slightly. All the major branches of heavy industry increased less rapidly than in October, and production declined in a number of important industries, including oil drilling, copper and many items of machine building. The production of iron and steel, most unusually, remained at the level of October.⁶⁰

⁵⁶ RGASPI, 17/3/981, 8, 97–111.

⁵⁷ GARF, 5446/20/62, 170.

⁵⁸ The November 7–8 holiday and the 30-day month reduced the number of days by 10 per cent.

⁵⁹ ZI, November 4, 1936.

⁶⁰ See ZI, December 5, 1936. The production of vehicles, goods wagons, combine harvesters, machine tools and ball bearings declined.

At the beginning of December, an editorial in the industrial newspaper 'The Last Month of the Year', criticised the growth of coal production as 'completely insufficient', but on the whole remained optimistic:

It can be affirmed that in the year as a whole the plan will be fulfilled 106–106.5 per cent. By the new year heavy industry will also complete its second five-year plan.⁶¹

This conclusion, though it proved true, was based on the successful growth in the first nine months of the year, and particularly in the first six months. In December, industrial production as a whole declined by 4.3 per cent. In the fourth quarter as a whole, production was only 24.8 per cent greater than in the fourth quarter of 1935, as against the planned increase of 31 per cent, and the quarterly plan to increase production by 17.3 per cent above the level of the third quarter was not achieved.⁶² And on the railways, the number of wagons loaded per day was only 11 per cent greater than in October–December 1935, and was lower in absolute terms than in both April–June and July–September 1936.⁶³

During the last quarter of 1936 a great deal of attention was devoted to the currency. On June 29 the Politburo had authorised the net issue of currency amounting to 500 million rubles in July–September.⁶⁴ Actual issue was successfully kept to this limit (see Table 21). The planned issue for October–December was also fixed at 500 million rubles, which would have meant that issue had kept within the annual

⁶¹ ZI, December 9, 1936.

⁶² The monthly percentage changes as compared with the previous month were as follows:

	<i>October</i>	<i>November</i>	<i>December</i>
Means of production	2.6	–1.1	–2.9
Means of consumption	4.1	0.7	–8.3
All large-scale industry	7.4	0.8	–4.3

Source: Osnovnye pokazateli, June and January–June 1937, 3.

⁶³ *Osnovnye pokazateli*, December 1936, 130. The average daily number of goods wagons declined from 92,000 in September 1936 to 86,500 in October, 84,000 in November and 80,400 in December (*Osnovnye pokazateli*, November and January–November 1937, viii).

⁶⁴ RGASPI, 17/162/20, 2.

plan of 1,300 million rubles.⁶⁵ This proved far more difficult to achieve. On October 28 the Politburo agreed to issue temporarily a further 400 million rubles to cover payments for agricultural deliveries and to ensure that workers were fully paid their wages before the November holidays, but insisted that this sum must be returned well before the end of the year.⁶⁶ A week later, on November 5, it authorised the issue of a further 100 million rubles on the same strict conditions.⁶⁷

However, in the course of November it became abundantly clear that it would be impossible to return these extra currency issues by the end of the year. In order to reduce the accumulation of cash in the hands of the population, the authorities decided to issue additional supplies of bread in the fourth quarter in spite of the bad harvest. In October–December the sale of flour to the bakeries and the population amounted to 3,390,000 tons, slightly greater than the plan and more than in any previous quarter.⁶⁸ But although this decision was to cause considerable difficulties in the first six months of 1937, it did not solve the currency problem.

On December 5 Grin'ko and Kruglikov (who replaced Mar'yasin as head of Gosbank) addressed a frank memorandum to Stalin and Molotov.⁶⁹ They stated that 'the income and expenditure of Gosbank in the 4th quarter have shaped up so that Gosbank does not have sufficient money to pay out wages without interruption and satisfy the other requirements of the economy'. They gave five reasons for this:

- (1) the increase in the cotton collections had increased payments by 800–900 million rubles above the plan;
- (2) in the first fifty days of the quarter wage payments had exceeded the plan by 470 million rubles: wages were supposed to be 11 per cent greater than the plan for July–September, and in fact were 20 per cent greater;
- (3) savings bank deposits were about 100 million rubles less than planned;

⁶⁵ RGASPI, 17/162/20, 83 (dated September 27).

⁶⁶ RGASPI, 17/162/20, 112.

⁶⁷ RGASPI, 17/162/20, 115 (dated November 5).

⁶⁸ The amounts of flour sold (thousand tons) were January–March 2,934; April–June 3,203; July–September 3,500; October–December 3,590: total for year 13,227, 12.9 per cent more than in 1935 (*Osnovnye pokazateli*, December 1936, 258–9).

⁶⁹ GARE, 5446/16^a/412, 3–5. Molotov forwarded the memorandum to the deputy chairs of Sovnarkom, Rudzutak and Chubar'.

- (4) various unexpected payments included sovkhos wage arrears of 50 million rubles and 100 million rubles for aid to mothers with many children;
- (5) the only additional income was 700–750 million rubles from the additional bread sales – and Narkomlegprom had failed to supply commodities for trade in October to the value of 250 million rubles in retail prices.

Grin'ko and Kruglikov accordingly requested that 300 million rubles' non-returnable currency issue should be permitted in October–December, in addition to the 500 million rubles already agreed, 800 million rubles in all.

On December 10 the Politburo accepted part of this claim, so that non-returnable issues in October–December would amount to 700 rather than the original plan of 500 million rubles.⁷⁰ But financial reality soon outdistanced the Politburo decision: net issue in October–December in fact amounted to 782 million rubles (see Table 21).

(E) THE FAILURE OF THE 1936 HARVEST

When the plans for 1936 were drawn up in the autumn of 1935, it was envisaged that grain production would increase from 90.1 million tons in 1935 to 103.8 million in 1936 (of course these official figures assume the usual exaggerated estimates of the size of the harvests), primarily as a result of the increase in yield from 9.4 to 10.2 tsentners per hectare.⁷¹ In mid-July 1936, the plans for grain delivery to the state were approved by the Politburo on the assumption that a good harvest would be achieved (million puds):

- (1) Deliveries by kolkhozy (735.2) and individual peasants (18.7) = 753.8; Payments in kind to MTS: 478.0;⁷²
- (2) Return of grain loans by kolkhozy (155.9) and sovkhosy (8.6) = 164.5;⁷³
- (3) Milling levy 87.9.⁷⁴

⁷⁰ RGASPI, 17/162/20, 130.

⁷¹ RGAE, 4372/34/417^a, 64, 4372/35/467, 85–86.

⁷² RGASPI, 17/3/979, 90–92 (dated July 11).

⁷³ RGASPI, 17/3/979, 30–31 (dated July 13).

⁷⁴ RGASPI, 17/3/979, 44 (dated July 18).

The total, which does not include deliveries by sovkhozy or *zakupki*, amounted to 1484.2 million puds, or 24.3 million tons. This quite high figure obviously assumed that in spite of the difficulties with the spring sowing (see pp. 299–300 above) the planned harvest would be achieved.

Reports of the bad effect of dry winds and drought on the harvest began to appear soon after harvesting began. According to the NKVD report from the Voronezh region on July 20:

the delayed spring, the *sukhovei* at the beginning of the harvest, the insignificant precipitation during May and June, and its uneven distribution in the region, created unfavourable conditions for the initial and further development of the spring crops ... The dry weather and strong winds in the period from June 20 to July 6 disrupted the normal growth of the spring crops in many districts of the region.

As a result, the estimate for the yield of spring wheat, 7 tsentners a hectare on June 15, declined to 6 tsentners on July 1.⁷⁵ A month later, NKVD reports from the Stalingrad and Kursk regions noted similar developments. In the Stalingrad region

in several districts ... in connection with the low yield of grain, particularly from the spring sowings, unhealthy attitudes appeared among some of the collective farmers; in some districts there were tendencies to depart on unofficial *otkhodnichestvo* to the towns, and these tendencies also existed in districts where the grain yield was more favourable.

Collective farmers, particularly women, failed to turn up for work in the kolkhoz, arguing that it was better to work on their own plots as

⁷⁵ *Sovetskaya derevnya*, iv (2012), 278–80; report of the Voronezh NKVD dated July 20, referring to the situation up to July 15. These reports, located in the KGB archive, are published extensively in *Sovetskaya derevnya*. They typically give accurate accounts of the agricultural situation plus a strong emphasis, as with nearly all NKVD documents, on alleged ‘counter-revolutionary’ activities. They were normally sent to Stalin’s and Molotov’s secretaries, to the central committee secretaries (at this time Yezhov, Kaganovich, Andreev and Mezhlauk), and to the head of the agricultural department of the central committee (Yakovlev). Thus Mezhlauk, who was head of Gosplan, received them, but as they were classified as secret or top secret it is not clear how far he was able to pass on the information in them to his Gosplan staff. In addition internal NKVD reports were sent by the regional NKVDs to Molchalov as head of the secret political department of the NKVD, and deal primarily with disruption and disorder in the kolkhozy and in the countryside. These have been extensively published in TSD.

the collective grain would fail anyway. There were cases where collective farmers bought up loaves and dried them as rusks, and this practice continued until advances of grain were issued for work in the collective fields. In the Kursk region, as a result of 'the unfavourable meteorological conditions this year, and also the effect of the unsatisfactory spring sowing in a number of districts, the grain yield in some districts was lower than last year'; in consequence collective farmers left to work in sovkhozy or in factories.⁷⁶ An NKVD report from the North Caucasus dated September 4 noted that

as a result of the lengthy *sukhovei* in May and June in the Stavropol' area and in a number of the former Kuban' districts, considerable damage to the autumn and spring sowings has been observed; in many kolkhozy up to 50% of the whole sown area has perished ... In some former Kuban' districts at the beginning of harvesting the grain yield was estimated at 4–7 tsentners per hectare; but as a result of the large losses permitted during the harvesting the yield was even lower.

In some kolkhozy not enough grain was grown even to meet the grain deliveries and repayment of the grain loans, and so they would need seed and food loans. Moreover, the drought in the spring and summer threatened the survival of livestock, which was the main branch of farming in a number of districts.⁷⁷

In spite of such unfavourable reports, Gosplan engaged in a complicated manoeuvre in which, while reducing the harvest evaluations for previous years, it increased the plan of grain production in 1936 from 103.8 to 104.8 million tons.⁷⁸ At this time Stalin displayed considerable complacency about the agricultural situation. He received a message from Kaganovich and Molotov proposing that high officials should be sent to regions where the grain collections were lagging, and that *Pravda* and *Izvestiya* should criticise these regions more strongly. But in a reply dated September 5 he objected to these proposals:

I think the grain procurements are going pretty well. We cannot demand that the pace keep increasing if there is a drought on the

⁷⁶ *Sovetskaya derevnya*, iv (2012), 292–3, reports dated August 13 with data relating to August 8.

⁷⁷ *Sovetskaya derevnya*, iv (2012), 300–5 (report relating to the situation up to September 1).

⁷⁸ RGAE, 4372/35/467, 86.

Volga and the harvest in Siberia is a full 20 days behind last year due to climatic conditions. We will collect the grain in Siberia, but it will be late. I consider the directive to newspapers that they criticise the regions 'more strongly' to be tactically wrong, since such criticism will only benefit the fascists' agitation about 'famine' in the USSR. We should not get nervous and give in to Kleiner's screaming. We will collect the grain in any case. We may collect a tiny bit less than last year, but we don't even need any more. We can just send people, but there is no reason to raise a clamour in the press.⁷⁹

Stalin was on vacation from August 14 to October 25 and, as usual, was consulted by Kaganovich about all the proposed changes in the grain plans. The record shows that the letter of September 5 reflects his calm attitude to the harvest difficulties. It is tempting to conclude that he had in mind the large grain reserves which had been accumulated, though they were not mentioned in the correspondence. In passing on the regional proposals and their own proposal to Stalin, Kaganovich and Molotov explained to him the reasons for the proposals, and their effect on the regional grain deliveries plan. Appendix A to chapter 12 summarises the correspondence. Stalin replied to 14 proposals, but suggested a change on only four occasions, and on three of these proposed a greater concession to the regions than that proposed by Kaganovich and Molotov.

Stalin's attitude to the *zakupki* was less tolerant than his comments on the normal grain collections. On October 5 Kaganovich and Molotov proposed a *zakupki* plan, divided by regions, amounting to 173.2 million puds (as compared with 218 million in 1935). Stalin replied on the same day seeking an increase for eight RSFSR regions and Ukraine, as follows: Ukraine 5, Azov 1.5, North Caucasus 1, Kuibyshev 1, West Siberia 1.5, Stalingrad, Moscow, Orenburg and Crimea .5 each. The total addition amounted to 12 million puds, giving a *zakupki* plan of 185.2 in all (3.03 million tons).

Throughout the autumn the reports from the regional NKVDs and other local authorities about the harvest and the situation in the countryside were unambiguously pessimistic. A large number of regions were affected. In the Kursk region, in a number of kolkhozy collective farmers left independently to work in sovkhozy or on building sites. The grain shortage also affected the situation in the towns, even though they were provided with earmarked supplies. 'In towns,

⁷⁹ SKP, 661.

district centres and in Kursk itself the sale of grain was disrupted', resulting in queues for bread in the shops and 'unhealthy attitudes among sections of the manual and office workers'.⁸⁰ In Voronezh region, the poor harvest meant that many kolkhozy could pay their members very little per labour-day worked, and in a number of districts the kolkhozy could not fulfil their obligations to the state and lacked seed for the 1937 spring sowing. This report, like others, noted that lack of fodder meant that collective farmers had to sell off their personal livestock.⁸¹ In the Yaroslavl' region, 'in a number of kolkhozy in districts which were investigated the food situation is very tense'.⁸² In the North Caucasus, in many districts the grain situation was worse than expected, the crop of maize and sunflower had completely failed, and vegetables and cucurbits had also been affected. Food assistance was essential:

Some of the collective farmers in the districts affected by drought, especially those with many children, have no grain stocks and acquire grain either by barter or by purchasing loaves in shops.⁸³

West Siberia was one of the few regions in the Russian republic which reported a 'generally very good harvest', but even here a group of districts was affected by drought and needed food and fodder help.⁸⁴

Through all these troubles the authorities struggled desperately to obtain grain deliveries and grain payments for the MTS. Stalin on vacation received regular telegrams from his assistant Dvinsky on the state collections. The last of these reported that by October 20 1,319 million puds (21.6 million tons) had been received as compared with 1,476 million puds (24.2 million tons) on the same date in 1935.⁸⁵ Eventually, 23.5 million tons were received in 1936/37, as compared with 26.0 in the previous year.

⁸⁰ NKVD report of October 10, referring to situation on October 5: TSD, iv (2002), 844–8.

⁸¹ NKVD report of October 13, referring to situation on October 10: TSD, iv (2002), 850–3.

⁸² NKVD report of October 15, referring to situation on October 10: TSD, iv (2002), 856–7.

⁸³ NKVD report of November 22, referring to situation on November 16: TSD, iv (2002), 886–90.

⁸⁴ TSD, iv (2002), 857–8, 862.

⁸⁵ TSD, iv (2002), 858 (telegram dated October 23). He received similar reports on August 23, September 13 and 23 and October 2.

CHAPTER TWELVE

THE SUCCESSFUL OUTCOME OF 1936

As we have seen, 1936 was a transitional year both politically and economically. The appointment of Yezhov as People's Commissar of Internal Affairs following the Zinoviev–Kamenev trial ushered in a period of vicious repression coupled with economic difficulties. The last three months of 1936 saw a sharp deceleration in the growth of the economy. But the year as a whole was a great economic success. The bad harvest of 1936 was due to the weather, not to any internal difficulties, and its consequences took effect only in 1937.

(A) INDUSTRIAL PRODUCTION

On January 3, 1937, Ordzhonikidze, in an enthusiastic but fairly frank communiqué (*raport*) published in the newspapers, and addressed to Stalin and Molotov, reported that as early as December 14 the annual plan for heavy industry, including the defence industry, had already been fulfilled. He estimated that by the end of 1936 production in Narkomtyazhprom industries would have increased by 34.1 per cent as compared with the planned 26.0 per cent. In the first eleven months of the year output per worker had increased by 26.5 per cent, exceeding the planned 23 per cent. Costs in the first nine months of the year had, however, been reduced by only 5.6 per cent as compared with the annual plan of 8 per cent. Other weaknesses included the lag of the coal, oil mining and non-ferrous metals industries behind the plan, and the failure of 'some' defence factories to reach their plan.¹

Three days later the commissariat issued an elaborate report on results in physical terms.² It extolled the 'tremendous victories' displayed in its columns. In the machine-building industry for example, 10 per cent more tractors had been produced than planned, and the production of ball bearings, though slightly less than planned, had increased by 75 per cent, 'not a bad result'. It also drew attention to

¹ ZI, January 3, 1937, accompanied by a commentary by L. Volodin.

² Summarised in ZI, January 6, 1937.

failures. Transport engineering (the great success of the previous year) had been 'a backward sector throughout the whole of 1936'.

But no complacency was permitted. On January 20, 1937, a stern editorial in *Pravda* entitled 'The Backwardness of Non-Ferrous Metallurgy is Intolerable' made it clear that heavy industry had no grounds for complacency:

In the past year alone the smelting of these metals has increased by more than one third. But nevertheless this is small, extremely small. We are a great and mighty power; and this is the fifth year in which the volume of our industrial production has been the largest in Europe. But in copper smelting we are in the fifth place, in zinc production in the fourth place, and in lead in the sixth place. This no longer suits us, comrades industrialists!

The editorial excoriates 'some directors' of copper factories who complained that their plan was 'very tense': they should 'work, not whinge'.³

In further communiqués, considerable achievements were claimed for Narkomlegprom of the RSFSR by Ukhanov and for retail trade turnover (including public catering, a lagging sector) by Veitser.⁴ Although these results were impressive, many industries had lagged behind the second five-year plan, and henceforth the optimistic aim of achieving the second plan, like the first, in only four years was less frequently mentioned.

The successful outcome of 1936 was also proclaimed by Gosplan in an article, 'The Most Important Results of the Stakhanovite Year', published in the economic newspaper on New Year's day 1937.⁵ The article claimed that the growth of industrial production had been more rapid than in the previous three years and that the *increase* in 1936 had been 80 per cent greater than *total* industrial production in 1913. It particularly praised Narkomtyazhprom, which by exceeding its plan for labour productivity had compensated for the underfulfilment in the other industrial commissariats. A few weeks later, on the anniversary of the foundation of the Red Army, Rukhimovich, head of the new People's Commissariat of the Defence Industry, warned in an article in *Pravda* that the fascist powers, armed with the latest

³ P, January 20, 1937; the last phrase is a quotation from Stalin.

⁴ ZI, January 4, 1937.

⁵ EZh, January 1, 1937 (E. Kviring, deputy head of Gosplan).

technology, were preparing to wage total war against the Soviet Union; all industry had been mobilised so that it could launch a lightning blow within 24 hours. He optimistically claimed that these plans did not take into account the Achilles' heel of the fascist powers – 'the class contradictions of capitalist society will inevitably grow sharper'. The Soviet Union, which had built up its civilian heavy industry, would be able to carry the war into enemy territory.⁶

In 1936 the production of consumer goods, measured in 1926/27 prices, increased by 27.2 per cent, exceeding the annual plan by 5.8 per cent. Both the light and food industries exceeded their plan. Light industry production increased by 30.8 per cent, somewhat more rapidly than the food industry.⁷ The production of cotton textiles, which constituted nearly one-third of all light industry production, increased by 29.6 per cent, and the production of boots and shoes by over 49 per cent.⁸ These increases measured in value terms were, as usual, somewhat greater than the increases in physical terms, but even in physical terms, which presumed no improvement in quality or in the complexity of production, the rates of increase were very high: 23.9 per cent for cotton textiles, 37.3 per cent for leather footwear (see Table 6). In the food industry, the production of meat and meat products expanded particularly rapidly (see Table 7).

During 1936 the production of both the commissariats for local industry and the industrial cooperatives also expanded rapidly; most of their output consisted of consumer goods. In 1936 local industry supplied 43 per cent of the output of light industry, and its light industry production increased by 26 per cent.⁹ The production of the industrial cooperatives increased by as much as 41.8 per cent.¹⁰ Heavy industry also made considerable progress in producing consumer goods, from a rather low level. Total production of mass consumer goods by heavy industry increased by 71.7 per cent, and included 486,000 bicycles (+65.8 per cent), 445,000 sewing machines (+19.6 per cent) and 4,385 tons of metal utensils (+258.7 per cent).¹¹

⁶ P, February 23, 1937.

⁷ *Osnovnye pokazateli*, December 1936, xxxii.

⁸ *Osnovnye pokazateli*, December 1936, 8–9.

⁹ *Osnovnye pokazateli*, December 1936, 4–5.

¹⁰ *Osnovnye pokazateli*, December 1936, 8–9.

¹¹ *Osnovnye pokazateli*, December 1936, xxxvii.

(B) THE CRISIS IN THE COAL INDUSTRY

The coal industry was the most important exception in the rapid progress of industry. In 1936 as a whole, coal production increased from 109.6 to 126.8 million tons, or by 15.7 per cent, but the industry failed to maintain the progress it had achieved when the Stakhanov movement was launched in the fourth quarter of 1935. In the first six months of the year, production declined from 359,000 tons per day in December 1935 to 320,000 tons in June 1936. Production rose in the second half of the year, but even in December it was 5,000 tons per day lower than in December 1935.

This poor result was at first attributed to sabotage and conservatism, but already by the spring of 1936 better counsels prevailed – for a few months. In the summer of 1936 reports and articles by senior industrial figures showed that a principal cause of the coal failures should be sought in labour problems. A decline in the labour force was combined with lower productivity. The total number employed in the industry fell from 300,000 in 1935 to 256,000 on August 1, 1936. The decline was particularly severe at the coal face, where the number working fell from 99,000 in 1935 to 79,000 on August 1, 1936, accelerating the trend which could already be observed in the first three years of the five-year plan.¹² Output per worker also declined, from 21.2 tons per month in October–December 1935 to 20.6 tons in April 1936.¹³ In his speech to the Council of Narkomtyazhprom, Ordzhonikidze commented that ‘these were sad results’; and even admitted that they had been accompanied by a questioning of the Stakhanov movement and, during February and March, by its ‘intensive elimination’.¹⁴

A major reason for workers’ decisions to leave the coal face was the effect of the increase in norms in the early part of the year. The management in the mines had accepted an increase of 24–25 per cent, already difficult for the average worker to achieve, but Glavugol’ revised this to as much as 31 per cent.¹⁵ In consequence of the failure of the average worker to reach this figure, wages declined in February and

¹² ZI, September 11, 1936 (unsigned article).

¹³ ZI, June 27, 1936 (Bazhanov’s report to the Council of Narkomtyazhprom).

¹⁴ ZI, July 5, 1936.

¹⁵ ZI, June 28, 1936 (A. Khachatryan, Stalinugol’).

March.¹⁶ Workers were already demoralised by the decision of Glavugol', contrary to the collective agreement, to charge workers rather than the enterprises for the cost of municipal services, water and electricity.¹⁷ Moreover, as a result of the inadequate preparation of the introduction of the new norms, 'many accidents' resulted.¹⁸ According to senior figures in the industry, coal machinery had been allowed to deteriorate, or even develop serious faults, so that its productivity was lower than it should have been.¹⁹ The editor of a local newspaper in a mining area summed up the effect of all these deficiencies on the miners:

Some workers move to the countryside, including workers graded 'excellent', and shock workers, leaving behind the disorder and stupidity prevailing in a number of mines.²⁰

As an immediate step to overcome the labour shortage at the coal face, early in July Ordzhonikidze ordered that 10,000 workers should be transferred from the surface to the coal face.²¹ In the course of September, 7,000 were transferred, and were granted their old rate of pay for a month even if they failed to reach the norm.²² But the industrial newspaper pointed out that even by the beginning of October many of those transferred had already returned to the surface.²³

The senior mining specialist, Academician A. Terpigorev, insisted that 'only the replacement of labour-intensive manual operation by machinery will enable an increase in the general productivity of the workers'.²⁴ Ordzhonikidze himself acknowledged that 'we must not delay in the question of mechanisation'.²⁵ In the course of 1936 the

¹⁶ ZI, June 28, 1936 (Bazhanov). Pyatakov also referred to the decline in wages in his address to the Council (ZI, June 30, 1936).

¹⁷ ZI, June 28, 1936 (M. Smirnov, Karaganda).

¹⁸ ZI, June 30, 1936 (M. Stroilov, chief engineer, Kuzbass).

¹⁹ PKh, 8, 1936, 28, 30 (Academician A. Terpigorev); ZI, June 28, 1936 (M. Smirnov).

²⁰ ZI, June 30, 1936 (I. S. Kaplan, from the newspaper 'Kadievskii proletarii').

²¹ See ZI, September 11, 1936 (unsigned article).

²² ZI, October 4, 1936 (Bazhanov).

²³ ZI, October 4, 1936 (editorial comment).

²⁴ PKh, 8, 1936, 22.

²⁵ ZI, July 5, 1936.

supply of coal machinery was substantially increased.²⁶ But, as we have seen, existing machinery was badly treated, and the increase did not prove sufficient to enable an immediate increase in production.

(C) THE ARMAMENTS INDUSTRY

The armaments industry, in some difficulty in 1935, in 1936 presented a sharp contrast with the coal industry. In 1936 an unprecedented increase in the production of armaments accompanied the increase in investment in the industry and in the armed forces, and the growth in the size of the armed forces (see pp. 95–6, 291–2, 340 above). The figures for the production of armaments vary considerably. The lowest estimate is that total production of the armaments industry, including its civilian production, measured in 1926/27 prices, increased by 53.3 per cent (see Harrison and Davies (1997), 383), but we do not have the figure for purely military production, which probably increased as a proportion of the total production of the armaments industry. A higher figure, an increase by as much as 105 per cent, was recorded for armaments purchased by the armed forces, measured in current prices. This somewhat overestimates the increase, as some price inflation took place (some subsidies to the cost of armaments were abolished in 1936). The extent of the inflation is not clear from the information available. In November 1936 the chief of the General Staff complained that ‘there is no military item for which we have not had a price increase by 10, 20, 30 or more per cent’ during the year.²⁷ One official document, however, put the increase in armament prices at only 8.6 per cent in 1936, while another stated that in the spring and summer of 1936 prices of the military production of Narkomtyazhprom increased by 14 per cent.²⁸ But even the Harrison number-of-weapons index increased by 60 per cent, and this index does not reflect the improvement in quality and sophistication of weapons. This was the most dramatic development since the growth in armaments in 1931–32, following the threat from Japan. In 1936 armaments production was more than twice as great as in the final year of the first five-year plan four years earlier.

²⁶ See RGAE, 7297/28/313, 13, 20–21.

²⁷ RGVA, 4/14/1626, 15 (Egorov to Voroshilov, November 3, 1936).

²⁸ Simonov (1996), 93, citing GARF, 8418/11/7, 83.

The year 1936 was a golden one for the aircraft industry. At the beginning of the year, on January 8, STO, while criticising 'insufficient attention to quality', claimed with some justification that 'in view of its strength, technical equipment and preparedness, it is already fully possible that the industry will become the first in the world'; by the beginning of 1937 the quality of its main aircraft and engines 'should at the very least not be lower than the best European and American models'.²⁹ In the outcome, aircraft production in 1936, measured in current prices, was two-and-a-half times as great as in 1935, increasing from 19.2 to 24.1 per cent of all armaments production. The number of aircraft produced increased by 'only' 44 per cent, but this figure conceals a major improvement in the type of aircraft. The production of the most advanced fighter, the I-16, a monoplane which replaced the I-15 biplane, increased by 70 per cent, from 531 to 906. According to the principal Russian authority, who was by no means uncritical of the industry, 'in 1936 the air forces of other countries did not yet produce an analogous fighter'.³⁰ The technical advance in the production of bombers was equally significant. The giant TB-3 four-engine all-metal bomber was completely redesigned by Tupolev's team, and equipped with a more powerful engine. In 1936 it achieved several international records.³¹ Production increased by 53 per cent. An even more important development in 1936 was the successful batch production of the high-speed SB, also designed by Tupolev. The efforts to begin batch production of the SB in 1935 had failed. But in 1936 the SB was produced from the beginning of the year. It was equipped with two M100 engines, Soviet adaptations of a French engine on licence from the firm Hispano-Suiza. The SB achieved a range of 1,250 kilometres and a speed of over 400 km per hour.³² In 1936 there was also a large increase in the production of training aircraft, and it was the peak year for the production of civil aircraft (see Table 4). The number of aero-engines produced, which had declined in 1935, increased by 53 per cent, primarily as a result of the successful launching of two new factories into mass production in Perm and

²⁹ Data from Rodionov (see Bibliography).

³⁰ *Samoletoostroenie*, i (1992), 157 (K.Yu. Kosminkov).

³¹ See Nemecek (1986), 127–8.

³² *Ibid.* 146–8; *Samoletoostroenie*, i (1992), 238.

Voronezh.³³ A report about aircraft R and D from M. Kaganovich to Molotov, dated March 11, 1937, claimed that the speed of most aircraft had been increased and their fuel consumption reduced.³⁴

The air force had been clamouring for these developments, and when the 1936 plan was prepared Voroshilov even complained that it was too modest. But the air force was somewhat overwhelmed by this huge expansion. On October 15, 1936, Alksnis, the head of the air force, reporting to the military council of Narkomoborony, emphasised the importance of 'the supply of new hardware (*materialnaya chast'*) – aircraft and engines, and their armaments and equipment'. The new aircraft required 'much greater knowledge and culture in their management, maintenance and exploitation'. The SB flew at twice the speed of its predecessors, and 'the pilot's cabin contains three times as many instruments and controls'. In consequence all the airmen concerned were spending 2–4 months in mastering the new technology.³⁵ Voroshilov, in his concluding speech at the council four days later, also stressed the impact on the air force of the sudden supply of large numbers of more advanced aircraft:

This year our air force has been re-equipped with new hardware. Our airmen have been confronted by hardware of which they had no conception, and had to master it as they went along. They had to learn not only to master the new hardware but to use it in battle. In the main our airmen have mastered it, but only in the main. A tremendous amount of work on a large scale lies ahead.³⁶

These favourable developments did not take place without a great deal of fierce argument behind the scenes. During the year, the industry, in spite of the opposition of the air force, launched an ambitious scheme, apparently on the initiative of Tupolev, to join together the efforts of the rival design bureaux to design and manufacture an aircraft which would combine long-distance reconnaissance with a light bomber. Substantial design resources were involved, but without success. Later commentators concluded that as a result the production of an adequate aircraft to support the ground forces

³³ *Samoletostroenie*, i (1992), 428–9. The construction of these factories began in 1931.

³⁴ *Stanovlenie* (2011), 619–23.

³⁵ *Voennyi sovet okt. 1936* (2009), 209.

³⁶ *Voennyi sovet okt. 1936* (2009), 427.

was delayed by two years.³⁷ Tupolev at this time was at the height of his powers: on January 6 he was appointed first deputy head and chief engineer of the Chief Administration of the Aircraft Industry while remaining chief designer of TsAGI. He was not without his enemies. At the end of the year, on December 11, Khakhan'yan, the member of the powerful control commission who was responsible for overlooking the aircraft industry, issued a series of strong attacks on his leadership, claiming that he blocked the work of other designers and that his aircraft designs were of poor quality, and questioning his continuation in his post.³⁸

The tank industry also made major strides forward in 1936. The number of tanks produced increased by 29 per cent, but this figure does not reflect the major improvements in the type of tank. Measured in current prices, military orders of tanks and vehicles increased by 109 per cent. The light tank T-26, based originally on the Vickers 6-ton model, had been produced in large numbers since 1932, and continued to be mass produced at the 'Bolshevik' factory in Leningrad throughout the 1930s. Throughout the 1930s a huge number of major and minor additions and improvements were made, and were reflected in the increase of its weight by 1936 to over nine tons. The number of new T-26 tanks equipped with radio also increased annually, and in 1936 amounted to 63 per cent of the total. Simultaneously batch production began of the other main light tank, the BT (*bystrokhodnyi tank* – fast tank). The BT had been designed and manufactured since 1932 at the Khar'kov Loco Works (KhPZ) on the basis of the US Christie tank. The BT was equipped with both caterpillar tracks and wheels, and when the tracks were removed it could travel much faster over land. The version produced in large numbers in 1936 was the BT-7, a much-improved model, equipped with an M-17 aero-engine made at the Rybinsk factory, and with both a cannon and a machine gun.³⁹ The BTs were heavier than the T-26s: the BT-7 weighed 14 tons. The BT-7 was strongly supported by the military. At the military council in October 1936, Khalepskii, head of armaments in the Red Army, declared that

³⁷ Perov and Rastrenin, i (2001) 27–9.

³⁸ See Rodionov, and Mukhin (2006), 208–9, citing GARF, 8419/11/80, 11. Mukhin wrongly claims that Tupolev had already been arrested at this time, but in fact he was not arrested until October 21, 1937, and seems to have been in favour with Stalin until then.

³⁹ Svirin (2005), ch. 8.

‘it would be expedient to provide brigades which are now equipped with the T-26 with a more rapid machine in addition, like the BT-5 or BT-7, for example, which would increase the mobility of the reconnaissance sections of mechanised brigades’. This tank would be used by the officer in charge of the brigade.⁴⁰ At the same council the head of staff in the Transcaucasus reported that in the mountains the BT-7 could manage an incline of 35° at 19 km an hour while the T-26 could only manage 20° at 12 km an hour, and the head of staff in Belorussia complained that tank brigades equipped with T-26 tanks were ‘insufficiently manoeuvrable ... I raise the question of re-equipping T-26 mechanised brigades with BT-7s’.⁴¹

Another important development was the partial replacement of T-37 small tanks with the newer T-38s. Both T-37s and T-38s were amphibious one-man tanks based on a Vickers-Carden Lloyd model, and like the T-26 were made at the ‘Bolshevik’ factory. Both were equipped with GAZ-AA 40 hp engines. The T-38 incorporated a number of modifications.⁴²

Throughout the 1930s only a small number of medium and heavy tanks were produced, but their numbers also substantially increased in 1936. The most important was the medium T-28 tracked tank, weighing 28 tons. It was armed with a 76.2 mm (three-inch) gun, as well as machine guns. It carried a crew of six, and could reach a speed of 37 km an hour.

Unlike the aircraft industry, which seemed to be moving from triumph to triumph on the international scene, the tank industry was already haunted by the shadow of foreign successes. In May 1936 the prominent Soviet designer S. A. Ginzburg reported that ‘at the present the best foreign tanks are overtaking ours in every respect except their armament’ – Czech, Japanese and French tanks were already being made with greater mobility and stronger armour plating.⁴³ The problem of the poor armour plating of Soviet tanks increasingly confronted the industry, reaching its culmination in the disasters of June and July 1941.

The more traditional defence industries also performed exceptionally well in 1936. In current prices, artillery orders increased by

⁴⁰ *Voennyi sovet okt. 1936* (2009), 140–1.

⁴¹ *Voennyi sovet okt. 1936* (2009), 154, 201.

⁴² Baryatinskii (2007), 48–50.

⁴³ Svirin (2005), ch. 8.

96 per cent. The number of artillery pieces rose rapidly.⁴⁴ The military had been engaged for some years in preparing new guns. The traditional divisional gun was the 76 mm gun of 1902, redesigned in 1930. On June 14, 1935, three versions of a new 76 mm gun, designed by V. G. Grabin, were considered. The one which became known as the F-22 was approved for batch production, which began in 1936. The ammunition industry also developed rapidly in 1936, from its previous low level. The plan for cartridges was exceeded; five times as many special-purpose cartridges were produced as in the previous year, as well as three times as many aircraft bombs and three-and-a-half times as many shells.⁴⁵

Orders for naval shipbuilding and naval aircraft increased by 69 per cent in terms of current prices, and – exceptionally – ships entering the navy, measured in tons, increased more rapidly – by as much as 113 per cent! Two-thirds of this increase was due to the commissioning of as many as 46 submarines. Muklevich, in a report to Stalin, Molotov and others, dated January 7, 1937, on behalf of the navy, often a severe critic of the industry which supplied them, enthusiastically praised the work of both shipyards and their suppliers.⁴⁶

(D) THE CAPITAL INVESTMENT CAMPAIGN

A major attempt to modernise the building industry was launched by the *Conference on Questions of Construction held in the Central Committee of the All-Union Communist Party (Bolsheviks)*. This took place between December 10 and 14, 1935, a few days before the plenum of the central committee which discussed Stakhanovism. It was attended by 350 prominent managers of large-scale building projects and of the building materials industries. Nine members of the Politburo took part, including Stalin, who was present on the last day. It heard

⁴⁴ While small-calibre guns increased by only 9 per cent, the production of the much more costly medium guns increased by 55 per cent, and large-calibre guns, produced in small numbers, by as much as 92 per cent.

⁴⁵ *Stanovlenie* (2011), 577–81 (report by K. F. Martinovich to Voroshilov dated January 1, 1937).

⁴⁶ *Stanovlenie* (2011), 586–96. These figures, if considered on an annual basis, are unreliable. Owing to the long construction period, annual fluctuations in completion varied greatly: in 1937 orders in terms of current prices increased by 11 per cent but the ships entering service measured in tons were only 22 per cent of the 1936 level.

reports from Mezhlauk, head of Gosplan, and S. Z. Ginzburg, head of Glavstroiprom (the Chief Administration of the Building Industry of Narkomtyazhprom). Molotov summed up the proceedings, and the conference was addressed by 45 speakers, including Ordzhonikidze, Kaganovich, Mikoyan and Khrushchev.⁴⁷

The conference was held only eight months before the Zinoviev–Kamenev trial, the first major public trial of the ‘Great Purge’, but it was almost free from attacks on the former oppositionists. Molotov criticised ‘1928 views on industrialisation’, but without mentioning Bukharin by name, and Khrushchev made a brief conventional attack on ‘the Trotsky–Zinoviev opposition and the right-wing opportunists’, but did not castigate them as class enemies.

Following the conference, two major decrees were promulgated on February 11, 1936. The decree of Sovnarkom and the party central committee, ‘On the Improvement of Construction Activities and the Reduction in Construction Costs’, which was already being drafted during the conference, was approved by the Politburo by poll.⁴⁸ Simultaneously, the Council of Labour and Defence adopted a supplementary decree ‘On the Reduction of the Cost of Production of Building Materials and Components’.⁴⁹ The decrees were primarily concerned with industrial building. They resolved that building organisations should be established for the coal, hydro-power, thermal electric power, iron and steel and oil industries, and that in each industry these should be supplemented by specialist building organisations for heating, sewage and water. Building materials should also be manufactured by specialised trusts, though these would often work for the major industrial building organisations. In all these activities contracts between the client and the builder would replace direct labour. On each site a ‘general contractor’ would be responsible for the work as a whole, itself signing contracts with the specialised trusts.

Both decrees strongly emphasised the importance of mechanisation. Some progress had already been made with the replacement of manual labour by machines. The total number of excavators had increased from 700 to 1,000 in 1935, and of cranes from 310 to 330.⁵⁰

⁴⁷ The conference was widely publicised in the daily press, and the verbatim report was published as *Soveshchanie* (1936).

⁴⁸ Published in SZ, 1936, art. 70.

⁴⁹ Published in EZh, 14 February 1936.

⁵⁰ *Soveshchanie* (1936), 20 (Mezhlauk).

The Sovnarkom and central committee decree required that 'up to 60 per cent' of earth work should be mechanised in 1936, and set similar targets for quarries and for the transport and production of their output.

The decrees paid much attention to the need for economy. Under the influence of Stakhanovism, labour productivity in construction was planned to increase by 'at least 30 per cent' in 1936. To encourage this, following the example of industrial production, the output norms for workers in the industry should be substantially raised, so that the wages received per unit of output would be reduced. The provision of finance would be tightened up. While financial arrangements would be more flexible as a result of providing each building organisation with its own working capital, the role of banks in controlling expenditure would sharply increase. According to the decree: 'Payment should be made in accordance with invoices based on acceptance certificates (*akty priemki*) for the work carried out, approved by the client.' The invoices should be prepared on the basis of the prices fixed in the cost estimate attached to the technical project, and reduced by the planned reduction in building costs.

With these reforms, the authorities hoped to secure the long-anticipated reduction in the cost of investment. In August 1935 the government agreed to reduce costs in 1936 'by at least 8 per cent in comparison with the estimate costs of 1935'.⁵¹ The decree of February 11, 1936, proposed that pure building costs should be reduced by at least 14.5 per cent as compared with the estimate costs of 1935 and that all investment costs (including the cost of capital equipment) should be reduced by at least 11 per cent.

Mechanisation was the heart of the programme. In 1936 the supply of excavators and other machinery again increased.⁵² Some priority sites even reported a surfeit of machines. According to the engineer responsible for the second phase of the main ball-bearing factory 1-GPZ, his site was 'saturated' with machinery, almost reaching the United States' level.⁵³ But generally machines were still in short supply. The industrial newspaper published a long list of items of equipment not yet received.⁵⁴ Even the 1-GPZ site lacked small machines and spare parts. And the available machines were often of

⁵¹ EZh, August 28, 1935 (STO sitting of August 23).

⁵² See *Osnovnye pokazateli*, December 1936, 20-1.

⁵³ ZI, September 21, 1936 (K. Myagkov).

⁵⁴ ZI, October 24, 1936 (A. Berezin).

poor quality and used inefficiently.⁵⁵ In consequence the amount of soil moved per day by Soviet excavators was only one-third of that moved by United States' excavators of the same capacity.⁵⁶

Mechanisation was to be accompanied by the replacement of temporary and seasonal manual labour by a skilled permanent labour force. By 1936 wages in Glavstroiprom were only 5 per cent lower than in large-scale industry, and could be supplemented by private work in the evenings. In Glavstroiprom a quarter of the workers now remained at the same site for more than two years. But this was a step on a long road. Only a quarter of the workers had received specialised training, and when workers left a site they still tended to move into industry rather than to other building sites.⁵⁷ At the Voroshilovgrad loco works most builders spent only one or two years at the site, and were poorly-educated youngsters. Plasterers, glaziers and erection workers were scarce.⁵⁸ In building as a whole, labour turnover failed to decline in 1936, and some increase took place in absence without due cause.⁵⁹ In spite of these deficiencies, output per worker continued to increase substantially, and more rapidly than wages.⁶⁰ Although the amount of building work ('pure construction') substantially increased, the labour force slightly declined, from 2,268,400 to 2,182,000.⁶¹

The decrees of February 1936 on the building industry recognised that the success of the capital investment plan depended on a substantial increase in the supply of building materials. The STO decree of February 11 allocated 644 million rubles to the building materials' industry, and called for the use of 'advanced industrial methods' in their production. A total of 56 large quarries should be mechanised, and large brickyards should be established which would work all the year round instead of seasonally. In Moscow, Leningrad,

⁵⁵ See, for example, *ZI*, October 10, 1936 (A. Berezin): concrete mixers newly produced at factory No. 67 were 'very unsatisfactory' and switches on hand-held electric saws lasted only one day.

⁵⁶ *ZI*, September 21, 1936 (B. Ronin).

⁵⁷ *ZI*, October 11, 1936 (V. Ratkov).

⁵⁸ *ZI*, October 16, 1936 (G. Rymolov).

⁵⁹ The number of workers leaving increased from 235 to 241 per cent a year, and registered absence without due cause increased from 1.87 to 2.42 days per year (GARF, 1562/10/468, 15, 14, dated 1937).

⁶⁰ Output per man day increased by 22.6 per cent, wages per man day by 19.2 per cent (GARF, 1562/10/357, 2-4 [1937]).

⁶¹ GARF, 1562/10/468, 11 (1937).

Dnepropetrovsk and Sverdlovsk central factories should manufacture finished concrete, and in Moscow and Leningrad reinforced-concrete factories should be completed or re-equipped.⁶² In April a conference on local building materials chaired by Chubar' declared that the results in January–March had been 'extremely unsatisfactory', especially in the case of brick.⁶³ Following the conference, a further STO decree called for increased brick production by the People's Commissariats of Local Industry and the industrial cooperatives.⁶⁴ In July, an investigation of the local brick industry by the central party control commission again found 'very poor' results, and reprimanded two key officials for adopting a plan for April–June which was too modest.⁶⁵ These cries of woe gave the impression that little had been achieved; and certainly the ambitious programme to modernise the building materials' industry made little progress. But a TsUNKhU report on the first six months of the year, while strongly criticising the industry for failing to achieve its plan, announced very large increases in production.⁶⁶ Production continued to increase in the remainder of the year. In 1936 as a whole the production of bricks was 40 per cent, of cement 30.8 per cent and of window glass 25.9 per cent greater than in 1935.⁶⁷

Least successful was the timber industry: production of rough timber increased by only 17 per cent. A report on the production of building components from timber described the 'extremely tense position for raw materials'.⁶⁸ The average daily number of wagons of building materials made from timber carried by the railways increased by only 11.4 per cent in 1936, while the equivalent figure for mineral building materials was as high as 73.3 per cent.⁶⁹ The Powell index estimates that the total production of building materials increased by 34.9 per cent. This was the most rapid increase for any year in the 1930s, and the pre-war peak (the 1936 level was not reached again until 1949).

However, the poor quality of building materials was strongly emphasised. Chubar' praised the brick industry for exceeding its

⁶² See EZh, February 14, 1936.

⁶³ P, April 16, 1936.

⁶⁴ P, July 14, 1936 (citing decree dated May 9).

⁶⁵ P, July 14, 1936.

⁶⁶ ZI, August 27, 1936.

⁶⁷ *Promyshlennost'* (1957), 291, 277, 312.

⁶⁸ ZI, October 20, 1936 (S. Nakhmarson).

⁶⁹ *Osnovnye pokazateli*, December 1936, xxvi.

plan but stressed that the increase of 60.4 per cent achieved in 1936 had not been accompanied by an improvement in quality.⁷⁰ The industrial newspaper claimed that 'brickyards responsible for millions of bricks produce nothing but wastage (*brak*)'. The permitted maximum tension on a brick had been reduced from 15 to 6.6 kilograms since the mid-1920s, so that wall thickness had to be substantially increased.⁷¹

During 1936 the drive to replace direct labour by contracts between clients and building organisations progressed in a wide range of industries. The most comprehensive developments took place in Glavstroiprom, where specialised building trusts were established responsible for earth work (Soyuzetskavator), electrical installations (Stroielektro) and housing (Zhilstroi).⁷² But elsewhere in industry direct labour arrangements were still widespread. In the Dnepropetrovsk region 'work by contract did not increase' and 80–85 per cent of building jobs in industry and transport and communications were still conducted by direct labour, including such major undertakings as the enlargement of the major iron and steel works in the region.⁷³

The switch to the contract system involved the adoption of stronger regulation of the approval of projects. From 1936 the estimate for a project was to be firmly based on the technical project, which was described as 'the only document for determining the cost of construction'. Approval was beset with difficulties. Some 157 of the 254 projects financed by the Moscow regional office of Prombank were sent back as inadequate.⁷⁴ A meeting of Sovnarkom in October concluded that the estimates on which contracts were based were generally of poor quality, and instructed Grin'ko to prepare proposals for improvement.⁷⁵

The difficulties of the switch to the new system, coupled with the increase in the number of contracts, reinforced the seasonal delays at the beginning of the year usual in the building industry, and according to one commentator 'transferred the centre of gravity of

⁷⁰ ZI, February 15, 1937.

⁷¹ ZI, February 17, 1937.

⁷² EZh, October 4, 1936 (E. Gol'dberg). 38 per cent of the total Glavstroiprom contract programme was undertaken by the specialised organisations (1,000 out of 2,600 million rubles).

⁷³ EZh, September 20, 1936 (S. Gorelik and A. Bogdanenko).

⁷⁴ EZh, September 29, 1936.

⁷⁵ ZI, October 12, 1936.

construction work to the second half of the year'.⁷⁶ Even in Glavstroiprom only 65.9 per cent of the annual plan was completed in the first nine months of the year.⁷⁷ Moreover, these figures exaggerated what had been achieved. In Glavenergo power stations with a capacity of 602,000 kW were due to be completed in 1936, but by the end of September only 100,000 kW had been installed.⁷⁸

In view of their failure to spend all their financial allocation, the spending commissariats wanted to continue the allocation after the end of the calendar year. In December a draft decree of Sovnarkom proposed, however, that the grants for 1936 should not be continued after December 31. A most unusual revolt occurred. The minutes record that Ordzhonikidze registered his objection to the proposal, and Kaganovich, Lyubimov and Rozengol'ts abstained. The decree was nevertheless promulgated on December 28.⁷⁹

The outcome of the capital investment plan for 1936 was reported in the press quite cautiously, as it was obvious that the ambitious programme to increase investment by 50 per cent had not been achieved. Ginzburg claimed that Glavstroiprom itself had achieved the target of increasing the capital investment for which it was responsible by about 50 per cent, largely as a result of the increase of building machinery. Nevertheless, he described this merely as the 'first advances' in turning a backward sector into large-scale industry, and emphasised the perfidious role of wrecking by the 'Pyatakov gang'.⁸⁰ At first no figures for investment appeared in the press. Eventually the 1937 plan, published in March 1937, stated that investment as a whole in 1936 amounted to 31,750 million rubles in current prices. This was a mere 16.9 per cent greater than the standard figure for 1935. But later sources, and data in the archives, state that investment including the new category 'extra-limit expenditure' amounted to 35,500 as compared with 27,200 in 1935, an increase of 30.5 per cent.⁸¹ This seems a fairly realistic figure. It roughly coincides with the Powell indicator for 'pure construction', which shows

⁷⁶ ZI, October 4, 1936 (E. Gol'dberg).

⁷⁷ ZI, November 12, 1936 (Narkomtyazhprom order). For Narkomtyazhprom as a whole, the percentage was only 59.6.

⁷⁸ ZI, October 16, 1936; the delay was attributed to the failure of suppliers to deliver turbogenerators.

⁷⁹ GARF, 5446/1/122*, 458-459 (art. 8/187).

⁸⁰ ZI, February 11, 1936.

⁸¹ Granovskii and Markus (1940), 43; RGAE, 1562/1/1039 [1937], 243; GARF, 1562/11/20, 3 [1938 or 1939].

an increase of 34.9 per cent (see Table 13), greater than the increases in 1934 and 1935.⁸² Later archive data fairly consistently show an increase of 30 per cent.⁸³

In spite of the large increase in investment, it proved as difficult as in the previous year to cater for the rival priorities facing the economy: defence, consumption and the continued growth of basic industry. Construction by Narkomoborony increased by as much as 112.3 per cent, and investment in the armaments' industries by 62.1 per cent (see Table 8).⁸⁴ Simultaneously investment in the food, light and local industries increased by 48.1 per cent and in internal trade by 59.8 per cent. Other services for the consumer received smaller increases. Investment in the commissariats of education and health increased by 28 per cent. And in spite of the publicity for the housing programme, investment, which had increased by one-third in the previous year, increased hardly at all in 1936.⁸⁵ Investment by the state in agriculture increased by a modest 16.1 per cent, partly because of the drastic cut in investment in sovkhozy, whose performance had failed to justify the huge grants they had received in previous years.

The defence and consumer sectors together received increases in investment amounting to 4,241 million rubles, more than half the total increase in investment. This meant that transport and the basic industries had to be content with much smaller increases. Investment in transport increased by only 14.2 per cent, less than half the rate of increase of investment as a whole. In 1935 top priority was given to investment in the railways, but in 1936 investment increased by only 10.1 per cent, and postal and other communications also received only a small increase. However, within the transport sector investment in the main roads, the northern sea route and the civil air

⁸² The other main component of investment, equipment and erection work, which comprises about one-third of all investment, increased less rapidly than 'pure construction' in 1936; according to data in the archives, *excluding* extra-limit expenditure, in 1936 pure construction increased by 21.2 per cent, and expenditure on equipment and erection by only 8 per cent (GARF, 1562/10/469, 1 [1937]).

⁸³ For the slight increase in investment costs in 1936, see Table 12.

⁸⁴ Investment in the NKVD increased by 45.5 per cent, and much of this was defence-related (including factory no. 62, Dal'stroi and the Baikal-Amur railway); but we do not know how this expenditure was classified in the investment data.

⁸⁵ Total investment in housing, including investment in housing attached to the commissariats, was 2,974 million rubles as compared with 2,918 million rubles in 1935.

fleet, all obviously strongly defence-related, increased much more rapidly.⁸⁶

In spite of the valiant efforts of Ordzhonikidze and his colleagues, Narkomtyazhprom, as in the previous years of the second five-year plan, received far smaller increases than nearly all the rest of the economy. Excluding the armaments' industries, investment in heavy industry increased by a mere 7.4 per cent. Investment in priority industries within Narkomtyazhprom nevertheless increased substantially. Investment in non-ferrous metals increased by 30.6 per cent, and for the first time equalled investment in iron and steel (in 1933 it had had been only 42.8 per cent of iron and steel investment). Copper, nickel and zinc received the most rapid increases.⁸⁷ Investment in chemicals increased by 27.3 per cent, primarily as a result of a large allocation to the defence-related nitrogen industry. Allocations to the oil industry increased by 32.2 per cent. Building and building materials also received substantial increases in their allocations: the investment in Glavstroiprom and in the cement industry more than doubled. But other industries were cut back. As in previous years, the allocation to the iron and steel industry was reduced, in 1936 by as much as 25.6 per cent. Within the iron and steel group, only special steels received a small increase in their allocation. Surprisingly, in view of the difficulties in the coal industry, investment in Glavugol' was reduced by 26.2 per cent: investment in the coal industry had been greater than investment in oil in 1933, but now it was less than half of the oil investment.

Very sharp changes also took place in the machine-building industries. The largest expansion was in the vehicle industry, where investment almost doubled. The two major factories – the Stalin works (ZiS) in Moscow, which produced cars, and the Gor'kii auto works (GAZ), which produced lorries – received over 90 per cent of the allocation to Glavavtoprom.⁸⁸ These two factories alone received the equivalent of four-fifths of the total allocation to the coal industry. With the effort to switch from wheeled to caterpillar tractors investment in the tractor industry also increased. In contrast, swingeing cuts were made in the allocations to other branches of heavy engineering. The allocations to the Uralmashzavod and Novo-Kramatorsk plants, the pride and joy of the machine-building industry in the first

⁸⁶ See RGAE, 1562/10/468, 5, 6 (1937).

⁸⁷ RGAE, 1562/10/582^a, 8 (January 31, 1939).

⁸⁸ RGAE, 1562/10/582^a, 61.

half of the 1930s, were reduced by one-third, and investment in transport engineering, which had been given top priority in 1935, was also sharply reduced.⁸⁹

The contrast between the priority and non-priority sectors was striking. Defence and the consumer sector, which accounted for 38.5 per cent of total investment, received 52 per cent of the increase in investment. But the transport and heavy industry sectors, which between them accounted for 44.7 per cent of all investment, received only 24.4 per cent of the increase. Sharp changes were also made within sectors. Although priority was given to the consumer, allocations to public catering were reduced and the allocation to housing stagnated.⁹⁰ Although heavy industry received only a small increase in its allocation, as we have seen, several of its sectors received large increases. The pressure of events and policies meant that the simple arrangement that key branches of heavy industry were always favoured in the distribution of investment, characteristic of the first years of Soviet industrialisation, had now been abandoned.

In 1935, for the first time in the 1930s, the value of projects completed had equalled that of investment. In the hope of continuing this progress, in April 1936 a Sovnarkom decree listed new factories, power stations and mines valued at 9,000 million rubles to be completed by Narkomtyazhprom by the end of the year.⁹¹ In October, a meeting of Sovnarkom addressed by senior politicians and officials from the industrial and transport commissariats resolved that they should concentrate their efforts in the remainder of the year on completing work at major sites.⁹² A few weeks later the industrial newspaper reported that many completions had been achieved, but cited cement and electric power capacity as still lagging.⁹³

In the outcome, work completed in 1936 exceeded the 1935 figure by 3,486 million rubles. But investment had increased more rapidly, so a gap between investment and completions again appeared, amounting to 4,724 million rubles, equal to 13.3 per cent of 1936 investment. Not surprisingly, the gap was widest in Group A industries and in transport, but information is not available to enable us to

⁸⁹ RGAE, 1562/10/582^a, 13.

⁹⁰ For similar changes within the armaments' industries, see pp. 326–31 above.

⁹¹ EZh, April 18, 1936.

⁹² ZI, October 18, 1936.

⁹³ ZI, December 4, 1936.

estimate how far the wider gap was due to the launching of new projects. In transport, the lag was particularly great in water transport, due to investment in major new canals which were still under construction.⁹⁴ The gap was particularly large in the case of the NKVD. Investment amounted to 2,694 million rubles, but projects completed only to 1,423 million. Most of the gap was explained by the large investments in major projects not yet completed, including the Baikal–Amur railway, factory no. 83, the main roads administration and Dal’sroi.⁹⁵

(E) EXPANSION OF THE GULAG

The substantial programme of capital construction for which the NKVD was responsible by 1935 was taken further in 1936. On January 15 an Administration for Special Construction was established within the NKVD following the decision that it should construct the major new grain storage facilities for the Committee of Reserves.⁹⁶ On March 4 Tsudotrans, which had been transferred to the NKVD in the previous year, was reorganised by a Sovnarkom decree into GUSHOSDOR, the Central Administration for Major Roads. Blagonravov, who had long been associated with the security services, was transferred from Narkomput’ to head the new organisation.⁹⁷ These two organisations, together with the Moscow–Volga canal, which was nearing completion, absorbed a considerable amount of NKVD capital investment⁹⁸:

1936	
Grain stores	388
GUSHOSDOR	816
Moscow–Volga canal	720

On February 2, the NKVD was also made responsible for constructing two further railway lines.⁹⁹

⁹⁴ See the tables in RGAE, 1562/10/531a, 70–71 [1938].

⁹⁵ RGAE, 1562/10/582^a, 6.

⁹⁶ *Svobodnaya mysl’*, 2, 2000, 112 (Kokurin and Petrov).

⁹⁷ *Ibid.* 113.

⁹⁸ GARF, 5446/20^a/461, 1.

⁹⁹ GARF, 9414/1/2947, 72, 75.

As a result of these developments capital investment by the NKVD increased from 1,852 million rubles in 1935 to 2,690 millions in 1936, an increase of 45 per cent, rising from 6.8 to 7.5 per cent of all investment (see Table 8).¹⁰⁰ The three items listed above alone accounted for over 70 per cent of NKVD investment in 1936.

Industrial enterprises managed by the NKVD also on the whole operated successfully. Gold production by Dal'stroi increased from 14.5 tons in 1935 to over 30 tons in 1936, and in both years the plan was exceeded.¹⁰¹ In the Ukhta-Pechora camp, production of coal and oil, as yet in small quantities, increased substantially.¹⁰² On July 10, 1936, an NKVD order praised the managers of the Temnikov timber camp for overfulfilling their plans: 'they accomplished the great task of supplying Moscow with firewood and providing timber for major Soviet building sites'.¹⁰³

Industrial production still, however, occupied only a minor part of NKVD activity, which was concentrated on the large-scale building projects. In October 1936, according to Gulag data, 1,095,000 prisoners in camps and colonies were engaged in economic activity, divided as follows (thousands):

138.7 (12.7 per cent): road building (GUSHOSDOR);

598.7 (54.7 per cent): major NKVD projects, including Dal'stroi, the grain stores, the Moscow–Volga canal, the Baikal–Amur railway (BAM), the White-Sea Baltic combine, Volgostroi, the Ukhta-Pechora camp, Noril'stroi and various railways;

117.2 (10.7 per cent) working for projects in other government departments, particularly Narkomtyazhprom and Narkomles, including the Magnitogorsk combine and the Chelyabinsk tractor factory.

¹⁰⁰ According to alternative figures, investment in the NKVD including allocations by other government departments amounted to 1,700 million rubles in 1935, and in November 1936 was expected to amount to 3,380 million rubles in estimate prices of 1935 (GARF, 5446/20^a/461, 1); however, these high figures were evidently not achieved in practice.

¹⁰¹ Production figures for 1936 vary from 32.5 to 33.4 tons: Khlusov (1998), 76; Shirokov (2000), 103.

¹⁰² GARF, 9414/1/2947, 51.

¹⁰³ GARF, 9401/12/94, 53–54.

The remaining 22 per cent of prisoners were engaged in agriculture and in industrial production, mainly to maintain the camps, and in minor building projects.¹⁰⁴

These results were obtained with a somewhat smaller camp population than in the previous year. The population of the camps and colonies declined from 1,296,500 to 1,196,400 in the course of 1936 (see Table 24), largely a consequence of various amnesties and the early release from the Gulag of shock workers, invalids and old people: 369,544 were released from the camps as compared with 211,035 in 1935 (these figures do not include the colonies). The number of special settlers also declined, from 1,017,000 to 917,000 (see Table 24). As a result of the stability of the number of prisoners and the general improvement in the economy, the conditions of prisoners somewhat improved and the number of deaths and illnesses continued to decline. The camp administration was anxious to improve labour productivity in view of the stability of the labour force and the considerable increase in the tasks imposed on the Gulag. NKVD internal documents devoted a great deal of attention to financial and labour discipline, and to the health of the camp population.

The need to meet construction and production targets led to a relaxation of the very close control previously imposed on the camps. The practice of allowing prisoners to be transferred freely from camp to camp became widespread (so-called transfer without a convoy – *raskonvoirovanie*). Such arrangements prevailed in the Ukhta-Pechora camp,¹⁰⁵ in some Far Eastern camps,¹⁰⁶ on the White-Sea Baltic combine,¹⁰⁷ and even with the work carried out on the Moscow–Volga canal near Moscow.¹⁰⁸ This enabled the administration to make many savings: they needed less of the scarce staff which managed the convoys, and were able to reduce greatly the time spent on mustering the prisoners and checking their numbers.

A standard provision of the camp regime which was frequently violated was the instruction that prisoners sentenced for political reasons could not take on administrative functions. These were usually the most skilled and best-educated prisoners, and could act as a

¹⁰⁴ TsAFSB, 3/3/520, 9–11.

¹⁰⁵ GARF, 9414/4/11, 135.

¹⁰⁶ GARF, 8131/27/111, 8.

¹⁰⁷ See *Cahiers du monde Russe*, vol. 43 (2002), 161–2 (N. Baron).

¹⁰⁸ GARF, 9489/2/35, 47, 9489/2/76, 6.

support for the camp administration in managing production. The report on the Ukhta-Pechora camp, written at the end of 1937 when a tight regime in the camps was being reimposed, even claimed:

During the celebration of the 20th anniversary of the establishment of the Vecheka-OGPU-NKVD [in December 1937] all the non-prisoner personnel were admitted to the prisoner zone, because a celebratory session was arranged in the prisoners' club. After the session the prisoners – spies and diversionists – danced with the wives of the officers responsible for militarised security ...¹⁰⁹

The introduction of this more flexible regime was also made possible because most of the camps were in remote areas, away from daily supervision by the centre. The centre in any case tended to ignore violations of the regulations if economic plans were successfully carried out.

The practice of reducing the length of sentences in return for good work was widespread. On January 31, 1935, a 'temporary Statute on cuts (*zachety*) in working days' unified these arrangements in two categories:

- (1) a reduction of the sentence by four days for three days' successful work, applied in the case of prisoners who had previously been manual or office workers, collective farmers, peasants or artisans who did not employ labour, and also had electoral rights;
- (2) a reduction of five days for four days' work for the remainder of the population including people deprived of the vote, former traders, kulaks and people working for the church or other religions.

Further privileges were offered to shock workers, while political prisoners were allowed smaller reductions.¹¹⁰

These arrangements provided a strong incentive for hard work and offered a prospect for the future which made it easier to bear the hardships of the camps. The more unusual system of so-called 'colonisation (*kolonizatsiya*)' also made life in the camps more tolerable. This was the practice of early release from the camp on condition

¹⁰⁹ GARF, 9414/4/11, 139.

¹¹⁰ GARF, 9401/12/98, 32–37.

that the prisoner continued to live and work in the camp region, usually accompanied by his family. Settlements of this kind were established, for example, near BAM, the White-Sea Baltic combine and the Ukhta-Pechora camp. From the point of view of the state these arrangements helped to settle large unpopulated areas and to provide a more permanent labour force for key projects.

Perhaps the most remarkable development in 1936 was the issue of a very long order by Yagoda 'On Measures to Improve the Work of Corrective Labour Camps' dated April 2 and remaining nominally in force until May 15, 1938.¹¹¹ It was sent to a large number of Gulag officials, including the managers, deputy managers and assistants of all the camps. Camp managers were instructed to ensure that within two months the order was read out at general meetings of all prisoners and discussed and analysed point by point. It was based on a survey carried out by Berman at the Volga and other camps which had revealed major defects. It listed 34 specific points concerned with poor camp conditions and faults in the production system, and proposed 24 measures to be adopted to deal with them, 13 concerned with the welfare (*byt*) of the prisoners and 11 with the arrangements at work. Here we summarise some examples of the listed defects:

- (2) infestation by insects due to lack of baths, etc.;
- (3) floors not regularly washed in the barracks, which were not clean or warm enough; clothes were washed badly and not ironed with a hot iron, hot water was not provided in the barracks or at work, and medical facilities were inadequate;
- (4) insufficient kitchens and stalls, so that prisoners after ten hours' work have to queue for 1–2 hours for food or to buy tobacco;
- (5) managers fail to inspect the issue of food, so that there are numerous complaints from prisoners of poor treatment;
- (12) insufficient effort to deal with slackers and to provide proper training;
- (15) skilled and specialist prisoners not allocated to their proper work;

¹¹¹ This order is published in full in *Svobodnaya mysl'*, 2, (2000), 113–17 (Kokurin and Petrov).

- (21) insufficient care and attention to prisoners and their complaints, so that their letters, parcels and money are delivered very late and sometimes do not arrive at all;
- (34) 'the most serious fault' of camp managers and their staff is their failure to visit the barracks often enough, and to talk to shock workers so as to find the faults in camp welfare and in production; 'prisoners do not know many of their "high-up" managers, do not see them either in production or in the barracks, and above all do not see quick and realistic measures, understood by every prisoner, to overcome the faults'.

This order thus provided a programme for the radical improvement of the forced-labour system, and should be considered together with Yagoda's proclamation at the same time that social order in Soviet society at large had become much more stable (see pp. 285–6 above). We do not know how far the order of April 2 was put into practice in the next few months. But with the appointment of Yezhov in September, the relatively stable and improved regime of 1935–36 soon gave way to worsening welfare for the prisoners and bleaker conditions in their work.

(F) INTERNAL TRADE AND CONSUMPTION

The increased production of consumer goods (see p. 323 above) formed the basis for the rapid expansion of internal trade. Retail trade turnover in 1936, including public catering, was planned at 100,000 million rubles, and in fact amounted to 106,800 million. Retail trade as a whole increased by 27.2 per cent; and rural trade increased more rapidly than urban trade (see Table 19). The rate of increase of retail trade turnover was more rapid than in any other year of the five-year plan except 1935, when the very large increase was partly due to the abolition of rationing, which resulted in a substantial increase in food prices.

During 1936 determined efforts were intensified to bring consumers into active participation in and influence on trade. Veitser insisted that Stakhanovism must be adapted to the interests of the consumer: Stakhanovism should not be primarily based on gross sales and labour productivity, because 'this might elicit negative results from

the point of view of servicing the Soviet consumer'.¹¹² This theme was taken up by a *Pravda* editorial, which declared that 'honest work and Stakhanovite labour in trade consists of genuine concern for consumers and the rapid satisfaction of their demands'.¹¹³ Many trade exhibitions in which consumers actively participated took place in Moscow, including an exhibition of toys attended by some 130,000 people. New specialised stores were opened for the elite, such as the crystal store which stocked over 100 types of glass.¹¹⁴ A decree of March 7, borrowing from Western practice, introduced trade marks on a voluntary basis, in order to 'increase the responsibility of production enterprises for quality', and 'enable consumers to choose'.¹¹⁵

Numerous decisions sought to use propaganda, administrative powers and economic incentives to increase the production of consumer goods and the efficiency of trade. On February 8 the Council of Labour and Defence resolved 'to discuss with the newspapers *Pravda* and *Izvestiya* the need to increase the criticism in the press of the work of the trade agencies and its treatment of the faults in trade, particularly in the case of goods which are not in short supply'.¹¹⁶ Propaganda was accompanied by practical measures. A lengthy decree of Sovnarkom planned to increase the production of consumer goods by the artisan cooperatives by 29.5 per cent in 1936, and to establish thousands of new repair shops.¹¹⁷ A further decree instructed Narkomtyazhprom to establish a minimum of 20 large workshops to produce consumer goods from the by-products of heavy industry.¹¹⁸ The facilities of kolkhoz markets were to be improved by transferring their management from the commissariats of municipal economy to the local agencies of Narkomtorg, which were to provide additional buildings and equipment. Elaborate requirements to support the markets were imposed on local soviets. Gosplan was instructed to include the necessary capital investment in republican and regional plans.¹¹⁹ With effect from July 1, 1936,

¹¹² See Randall (2008), 91.

¹¹³ *P*, September 26, 1936.

¹¹⁴ See Randall (2008), 62, 138.

¹¹⁵ SZ, art. 113 (decree of TsIK and Sovnarkom). Cooperative artels and voluntary organisations were permitted to participate, as well as state enterprises.

¹¹⁶ GARF, 5446/1/122b, 20 (handwritten).

¹¹⁷ SZ, 1936, art. 68, dated January 17, 1936.

¹¹⁸ SZ, 1936, art. 324, dated July 7.

¹¹⁹ SZ, 1936, art. 65, dated February 4.

the practice was revived from the 1920s that trading agencies placed quarterly orders in advance with industry, covering 60 per cent of the production of mass industrial consumer goods.¹²⁰ Narkomvnutorg and its local agencies acquired the right to check that industrial sales depots were despatching both the quantity and quality of goods stipulated in the plan, and they were instructed, together with the regional authorities, to ensure that 'goods in daily use', including sugar, salt, soap, makhorka and matches, were available, and to prosecute those who were responsible for interruptions in supply.¹²¹

The central authorities also attempted to expand the agencies responsible for the transfer of goods from producer to retailer. On April 16 a decree of the Council of Labour and Defence instructed the industrial commissariats to increase the number of their wholesale sales bases from 1,141 to 1,895 in the course of 1936, following a scheme prepared by Narkomvnutorg.¹²² In the same month a draft decree of Sovnarkom provided for the establishment of regional 'state offices for intermediate trade (*torgovoe posrednichestvo*)' to assist the coordination of supply and demand between all the industrial and trading organisations within the region by publishing information bulletins on supply and demand and acting as contractors between producers and retailers.¹²³

In other respects, however, as in other sectors of the economy, 1936 was an ambiguous year. As a result of the reorganisation of retail trade by the decree of September 29, 1935 (see p. 231 above), involving the withdrawal of Tsentsrooyuz from urban trade, the number of urban shops declined from 73,600 to 72,500, and the consolidation of the rural trading network resulted in a decline in the number of rural shops and stalls. In total the number of trading units in the USSR declined from 286,000 to 269,000. There was a sharp switch from cooperative to state trade. The number of trading units managed by Narkomtorg almost doubled, while the number managed by Tsentsrooyuz declined by 30 per cent (see Tables 19(a) and (b)).

In the spring of 1936 the Commission on Soviet Control undertook an investigation of Tsentsrooyuz and the retail cooperatives in order to establish how far the reform of September 1935 had been successful in improving rural trade. On May 30, 1936, the

¹²⁰ SZ, 1936, art. 68, dated February 15.

¹²¹ SZ, 1936, art. 105, STO decree dated February 17.

¹²² SZ, 1936, art. 202.

¹²³ GARE, 5446/1/115, 148–150.

commission reported that the plan for January–March 1936 had been exceeded, but that many rural shops were unable to satisfy the demand for essential industrial consumer goods such as tobacco, salt and matches; children's goods, musical instruments and stationery were also in short supply. The commission complained that trading agencies often still engaged in 'the mechanical allocation of goods instead of trade'.¹²⁴

The relatively low prices of industrial consumer goods meant that shortages were endemic. Queues were frequent, and goods purchased in state shops were often illegally resold on the market at higher prices. Citizens of small towns, and peasants, travelled to the major cities searching for goods. On June 26, on Stalin's initiative, the Politburo established a commission chaired by Chubar' to consider the prevalence of queues and 'speculation' in Moscow, Leningrad, Kiev and Minsk.¹²⁵ A week later Grin'ko wrote to Molotov proposing that the retail prices of industrial consumer goods should be increased, and this proposal was incorporated in the proposals of the commission when it reported to the Politburo on July 14.¹²⁶ On July 19, the Politburo decided to allocate additional supplies to Moscow, Leningrad, Kiev and Minsk, and to concentrate the sale of scarce goods in a relatively small number of shops, in which the prices of textiles and footwear were increased by 25–30 per cent. The amount of textiles and footwear to be sold per person was restricted. The decision also instructed the NKVD to exile up to 5,000 speculators from the four towns.¹²⁷ By the beginning of September 4,003 persons had been sentenced by NKVD *troiki* in the four towns, and in 25 regions an additional 1,635 persons were sentenced by the courts.¹²⁸

The food situation was much more favourable, at least in the first months of the year. In the year as a whole both the elite and the ordinary consumer in town and country enjoyed an improved standard of

¹²⁴ SZ, 1936, art. 177; the decree was approved by Sovnarkom.

¹²⁵ RGASPI, 17/163/1108/14 (art. ii).

¹²⁶ GARE, 5446/18a/309, 264–268.

¹²⁷ RGASPI, 17/3/979, 2 (item V on the agenda), 49–55; the decision was adopted as a decree of the central committee and Sovnarkom; an appendix gave an extensive list of old and new prices. A curiosity of the decision was that the commission had proposed that 'the total number of shops selling textiles and footwear is reduced' while the decree stated that 'Narkomvnutorg is required to *extend* the number of shops selling *high-quality* goods (textiles and footwear)'¹ (our italics).

¹²⁸ GARE, 8131/37/73, 19; Hagenloh (2009), 220–2.

living. In the early part of the year many foods were available in ample quantities. In some cases – rare in Soviet history – the abundance of supply led to the reduction of retail prices. On June 9 Molotov reported to the Politburo that ‘the sale of butter, especially the higher grades (“Ektra”, “Higher Grade”) is very unsatisfactory; by June 1 only 45 per cent of the April–June plan has been sold’.¹²⁹ In consequence the prices of these grades were lowered by one or two rubles per kilogram (5–10 per cent).¹³⁰ But there are also clear indications, confirmed by memoirs, that as the year progressed food shortages, which had greatly declined in 1935, tended to increase. In 1934 and 1935, with the increased supply of food through socialised trade, the prices on the kolkhoz market had greatly, and fairly steadily, declined. In 1936 kolkhoz prices were still lower than in the previous year. But, as a result of the poor 1936 harvest, the gap narrowed. In January kolkhoz market prices were 29.3 per cent lower than in January 1935, but in November only 7.3 per cent lower than in November 1935.¹³¹ A comprehensive figure for December is not available, but the gap relative to the previous year was certainly narrower.¹³² Although the supply of bread to the population increased in the last quarter of 1936, shortages began to develop. In a memorandum to Stalin and Molotov Veitser pointed out that the decree of March 19, 1935, limiting the amount of bread which could be stored by an individual to 32 kilograms, had not been enforced in 1936, and speculative purchases of grain were taking place in a number of regions. In response to this memorandum, Vyshinsky stated that he and Krylenko had already sent a circular to Yezhov for his endorsement enforcing measures against excessive bread purchases, and that

¹²⁹ See *Stalinskoe Politbyuro* (1995), 38.

¹³⁰ RGASPI, 17/3/978, 41 (Politburo resolution of June 11).

¹³¹ Urban kolkhoz market prices in 1936 as a percentage of prices in the same month in 1935:

January 70.7; February 73.3; March 75.3; April 74.9; May 75.4; June 81.0; July 83.7; August 82.5; September 81.4; October 84.0; November 92.7.

These figures are for between 74 and 99 towns, depending on the month, and for 32 food products (but only 25 in January–March, and grain products are excluded for July–December, when trade in grain products was illegal) (*Osnovnye pokazateli*, November 1936, 248).

¹³² Data for prices on December 25, 1936, as compared with December 25, 1935, for 13 major towns and nine food products show price increases for 52 observations, no change for 17 and price reductions for 40 observations (*Osnovnye pokazateli*, December 1936, 282–5).

he had already issued 'exhaustive instructions' at the request of local procurators.¹³³

While the food and light industries developed rapidly, other consumer sectors were much less successful. Public catering continued to stagnate, and the supply of new housing amounted to only 33.8 per cent of the plan. In spite of the public enthusiasm for the Moscow reconstruction plan, Moscow, which was planned to receive nearly one-third of new housing space, in fact received only 21 per cent, while in contrast Berezniki, Gor'kii, Gorlovka and Kemerovo achieved more than two-thirds of their plan.¹³⁴

(G) FOREIGN TRADE

The pressures on the foreign trade balance were particularly acute in 1936. In its decision of November 9, 1935, the Politburo correctly expected that exports would continue to decline, and hence reduced the normal import plan for 1936 to 120 million rubles as compared with 143 million rubles in 1935 (this figure excluded imports resulting from the German loan and the Czecho-Slovak and British credits).¹³⁵ The plan evidently met with considerable resistance from the commissariats requiring imports, and a month later it was increased to 130–135 million rubles, the details to be settled by the VK (Foreign Currency Commission).¹³⁶ In the final plan, approved on January 16, 1936, the import figure was set at 136.1 million rubles. Within this total, the import of capital equipment was planned at 31.9 million, as compared with a lower figure previously approved by the VK.¹³⁷ However, expenditure from the German credit in 1936, valued at 46 million rubles, would almost double the purchase of equipment. Half of this increase was allocated to Narkomtyazhprom, and would be mainly used for the armaments industry.

¹³³ GARF, 8131/37/73, 246, 248–250; Veitser's memorandum was dated December 21; Vyshinsky's memorandum was dated December 23, and he claimed that this memorandum to Yezhov had been sent on December 20.

¹³⁴ *Osnovnye pokazateli*, December 1936, 299.

¹³⁵ GARF, 5446/1/483, 137 (art. 2462/406ss).

¹³⁶ GARF, 5446/1/483, 157 (art. 2604/428ss, dated December 4).

¹³⁷ GARF, 5446/1/485, 22–105. This very bulky document was presumably supplied to Sovnarkom by the VK. The Politburo approved an outline of the plan on January 14 (RGASPI, 17/162/19, 29). For the lower plan for equipment import, approved by VK on January 3, see GARF, 8422/3/9, 5–7 (art. 5).

In the course of 1936 the pressure from the defence sector on imports considerably increased. The Politburo frequently gave permission for *ad hoc* purchases for defence purposes. Here are some characteristic examples:

January 20: delegation sent abroad to purchase inverted air-cooled engines (RGASPI, 17/162/19, 35–6);

March 17: specific aircraft and engines to be purchased from USA, France and UK, with tools; staff to be sent to USA for technical assistance (*ibid.* 120–1);

April 10: licences and technical assistance approved for aircraft obtained from USA and UK (*ibid.* 134);

September 9: purchases for defence investment to be made from UK valued at £4.8 million; reserve of £0.5 million to be spent on arms if permitted (RGASPI, 17/162/20, 71–2);

November 2: contracts approved for ship turbines with Brown, Camel Laird and Parsons and for technical assistance with destroyers with Jarrow (*ibid.* 114);

December 28: import approved of two-seater Seversky fighter with Wright cyclone engines, plus licences and technical assistance (*ibid.* 127).

Some other urgent requirements also increased the import bill. In particular, the Chelyabinsk tractors were being converted to the use of diesel fuel with great difficulty, and in May 1936 the Politburo authorised the expenditure of the accumulated import quotas of the factory and allocated an additional quota.¹³⁸

In the outcome, imports, instead of declining, substantially increased in 1936, and the proportion of imports devoted to machinery and related items increased from 18.0 per cent of the total in 1935 to 36.1 per cent in 1936 (see Table 20). But exports continued to decline, as expected. As a result of the bad harvest, the export of grain drastically declined, and the sale of oil, coal and timber also declined. For the first time since 1931, imports nearly equalled exports, and the positive balance of payments was much smaller than in 1935 in spite of the new loans and credits from abroad (see Table 20).

¹³⁸ RGASPI, 17/162/19, 183 (art. 44, dated May 23); GARE, 5446/1/486, 171 (art. 908/147ss, dated May 23), 186 (art. 935/153ss, dated May 23).

(H) LABOUR AND LABOUR PRODUCTIVITY

The trends in employment characteristic of the previous two years continued in 1936. The total non-agricultural employed labour force increased by only 1.3 million persons, 6.0 per cent. The number employed declined in building, and remained constant on the railways. The largest absolute increase was in industry – 675,000 – but this increase of 7.4 per cent was in relative terms somewhat lower than in the previous year. The most rapidly expanding sectors were those serving the consumer – trade (12.0 per cent), education (13.7 per cent) and health (21.8 per cent, the most rapidly expanding sector). Between them these three sectors accounted for an increase of 613,000 manual and office workers, nearly half the total increase.

Within industry MCMB (metal-cutting and machine building), which included armaments, again expanded rapidly, but more slowly than in the previous year (11.2 per cent), and food, drink and tobacco, which had increased very rapidly in 1935, now increased only at the average rate. In a number of industries, including electric power, coal and iron ore, the number of workers declined: this was the first year of the second five-year plan in which this happened. The huge growth in industrial production in 1936 was very largely a result of the increase in output per worker. The increase in output per worker in heavy industry was unprecedented: it amounted to as much as 24.9 per cent, and accounted for 80 per cent of the increase in production. The increases in output per worker were lower in the light and food industry (20.9 and 15.6 per cent), but still accounted for two-thirds of the increase in the production of light industry and about 58 per cent of the increase in the food industry.

The increases in productivity in 1936 were closely associated with the decision at the December 1935 plenum of the central committee to increase output norms substantially. The time table laid down in the resolution varied according to the industrial commissariat. In all industries the revision of equipment norms was to be completed by the end of 1936. Narkomtyazhprom was ‘to begin the revision of output norms in the direction of some increase’ at the beginning of 1936; in the other commissariats the norms were to be revised somewhat later.¹³⁹

¹³⁹ P, December 26, 1935.

The changes in norms in the course of 1936 are carefully examined by Benvenuti, Siegelbaum and Filtzer. The new norms began to be introduced from March 1 in the coal industry and in the iron and steel industry of the centre and south, and in April in the engineering industries. The increases were substantial. In Narkomtyazhprom, the increase ranged between 10 and 55 per cent, depending on the industry.¹⁴⁰ But the increases were so arranged in most industries so that the majority of workers soon exceeded their norms. In iron and steel, for example, they were fixed at the level of the average annual output in December 1935.¹⁴¹ According to a sample survey, by October 1936 only 11.8 per cent of piece workers in the iron and steel industry and 14.2 per cent in MCMB had not reached their norms, but in the light and sawn-timber industries the percentage was much higher: 45.5 per cent in cotton textiles and 31.4 per cent in sawn timber.¹⁴²

The record increase in labour productivity in 1936 was accompanied by some deterioration in labour discipline. Labour turnover, as measured by the percentage of workers leaving or dismissed from their jobs in the course of a year, had declined sharply in 1933, 1934 and 1935, but in 1936 it increased slightly from 86.1 to 87.6 per cent. In Narkomtyazhprom, the percentage leaving increased from 70.0 to 72.8 per cent.¹⁴³ A survey disclosed that the turnover was mainly due to a minority of workers. 'Up to 75 per cent' of workers remained in the same enterprise, but the remaining 25 per cent changed their job an average of four times during the year.¹⁴⁴ The level of absenteeism also increased during the year. A report from Kaminsky, People's Commissar for Health, stated that while days off for sickness and injuries had greatly declined in 1933–35, they had increased in January–September 1936. While this was mainly due to an influenza epidemic, the number of accidents had increased for a variety of reasons, including the overloading of the

¹⁴⁰ See Filtzer (1986), 184.

¹⁴¹ For details, see RGAE, 4372/34/579, 121–5 ([May] 1936).

¹⁴² *Osnovnye pokazateli*, December 1936, 283. The survey covered several hundreds of thousands of workers in the heavy industries and several tens of thousands in the other industries.

¹⁴³ *Tyazhelaya promyshlennost' 1936* (1937), 229–31. The increase was particularly large in the coal industry: from 95.6 to 110 per cent. In iron and steel turnover increased from 69.2 to 72.0, and in MCMW from 54.8 to 57.6 per cent.

¹⁴⁴ See *Industrializatsiya 1933–1937* (1970), 491 (a Gosplan report dated May 20, 1937).

factory area, the lack of special clothing, inadequate lighting and badly maintained ventilation, compounded by the poor quality of factory inspection.¹⁴⁵ There was an increase not only in justified absence but also in absence without due cause, which rose in Narkomtyazhprom from 0.75 to 0.98 days per worker.¹⁴⁶ In July, Polonskii, a secretary of the AUCCTU, reported to Lyubimov the 'extremely poor conditions of work' in the textile factories. Poor ventilation had led to a number of serious illnesses and had resulted in 'a mass of justified complaints about poor conditions of work' from both male and female textile workers in the Ivanovo region (the centre of the disturbances in the spring of 1932).¹⁴⁷ The intensification of labour in the Stakhanovite year had its downside.

(I) COSTS AND FINANCE

To an even greater extent than in the previous year, in 1936 changes in costs were particularly difficult to measure owing to the changes in prices of inputs. In 1936, a major reform was carried out of the transfer prices (*otpusknye tesny*), which were charged to purchasers. Since 1928, costs had increased more or less continuously, particularly in heavy industry, but purchasers had been protected by keeping transfer prices fixed and paying subsidies to industry. Early in 1936, shortly after the approval of the 1936 plan, a major reform of transfer prices was discussed extensively in Gosplan and Narkomtyazhprom.¹⁴⁸ On March 2, 1936, a Sovnarkom decree was issued entitled 'The Introduction of New Transfer Prices (*otpusknye tseny*) for the Output of the Heavy and Timber Industries and of New Charges for Freight Carried by Railway and Water Transport'. The decree explained that these measures were being introduced to

¹⁴⁵ GARF, 5446/22/538, 24–28 (report to Molotov and Shvern timer dated February 28, 1937).

¹⁴⁶ *Tyazhelaya promyshlennost' 1936* (1937), 232. These figures exclude seasonal industries.

¹⁴⁷ GARF, 5451/20/232, 1.

¹⁴⁸ See, for example, the Narkomtyazhprom memorandum to Sovnarkom dated February 3, 1936, which complained that the Gosplan draft decree 'prepared in the course of several days' was 'extremely inaccurate' (published in *Istoriya tsenoobrazovaniya 1929–iyun' 1041* (1973), 333–5).

strengthen economic accounting (*khozyaistvennyi raschet*), to establish a correct relationship between different branches of industrial production and rail and water transport, and to abolish budget subsidies which are no longer necessary in most branches of the economy as a result of the successes achieved in the mastering of new technology.¹⁴⁹

The decree was applied by a Narkomtyazhprom order of March 28, signed by Rukhimovich, which insisted that directors of enterprises and heads of building sites must 'without exceptions' use the new prices from April 1.¹⁵⁰

The dramatic results of the decree are shown in Table 23 (b). The increase amounted to 45.6 per cent in heavy industry as a whole, and varied from a mere 6.5 per cent for the machine-tool industry, where the costs were high in 1928 and had been relatively reduced by the mass production of the 1930s, to 98.2 per cent for coal and 141.8 per cent for coking chemicals, traditional industries in which costs had greatly increased. For some traditional industries, it emerged that the new prices did not fully cover costs and some subsidies were already necessary.¹⁵¹ Freight charges on the railways had been increased by a similar amount: 41 per cent.

The decree instructed that the new prices should be introduced by April 1, 1936. Later in the year Gosplan reported to Sovnarkom that the effect of the reform in 1936 was to increase costs in industry by 6.7 per cent instead of reducing them by 6.2 per cent as originally planned, an overall increase of 12.9 per cent. In absolute terms, the cost increase in the economy as a whole, including the increase in freight charges as well as prices, would amount to 2,553 million rubles, of which 1,745 million rubles would be in Narkomtyazhprom itself and 372 million rubles in Narkomput'.¹⁵²

In 1936, as in 1935, the statistics distinguished between changes in commercial cost, which included the effect of price increases, and adjusted costs changes, due solely to 'intra-production factors'. The

¹⁴⁹ Sovnarkom decree no. 406, reprinted in *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (1973), 742-81.

¹⁵⁰ RGAE, 7297/1/132, 57, 57ob (order no. 557).

¹⁵¹ Gosplan reported on May 29, 1937, that in 1937 the transfer prices adopted in 1936 incorporated losses in 1937 of 16.9 per cent in the case of peat, 0.14 per cent for non-ferrous metals, and 6.2 per cent for coal; the losses for coal amounted to 174 million rubles (reprinted in *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (1973), 151).

¹⁵² Memorandum dated August 4, 1936, reprinted in *Istoriya tsenoobrazovaniya 1929-iyun' 1941* (1973), 139-41.

results for 1936 show that the effect of the price changes in heavy industry was to increase costs by 11.7 per cent (5.0 + 6.7 per cent):

	<i>1936 plan including price changes</i>	<i>1936 plan excluding price changes</i>	<i>1936 actual including price changes</i>	<i>1936 actual excluding price changes</i>
Narkomtyazhprom	+3.1	-8.0	+5.0	-6.7
Narkomlegprom	+5.0	-5.0	+7.0	-3.2
Narkompishcheprom	+4.9	-5.0	+6.0	3.4

Source: GARF, 5446/26/74, 36-30 (report from Mezhlauk and Chubar' dated January 31, 1937). Preliminary figures.

It will be seen that actual costs excluding the effect of price changes declined, but not quite to the extent planned. Later figures for Narkomtyazhprom show a slightly smaller decline in costs, and as in 1935 a considerable variation between different industries. Commercial costs rose most sharply in industries dependent on the supply of raw materials, which increased greatly in price; increases in both commercial and adjusted costs were low in the machine-building industry.

	<i>Costs including price changes</i>	<i>Costs excluding price changes</i>
All Narkomtyazhprom	+4.5	-6.1
Glavelektro	-7.6	-5.3
Coal	+3.0	+1.8
Iron and steel	+25.2	-6.2
Iron ore	-7.7	-10.5
Oil extraction	+19.1	+15.8
Coke and coking chemical	+37.8	-1.7
Glavsvetmet	+11.6	-0.1
MCMW	-1.2	-10.5
Basic chemical	+3.1	-12.4
Soyuztsement	+1.9	-8.1
Soyuztorf	-11.2	-11.8

Source: *Tyazhelaya promyshlennost' 1936* (1937), 237.

A major factor in cost reduction was the extent to which productivity increased more rapidly than wages per worker. There were sharp differences between industries. In Narkomtyazhprom and Narkomlegprom, productivity increased more rapidly than wages, but the reverse was true in Narkompishcheprom, Narkomles and the commissariats of local industry. Industry was overwhelmingly dominated by Narkomtyazhprom and Narkomlegprom, which accounted for 4,637,000 of the 7,400,000 persons employed in large-scale industry, 62.8 per cent. Within heavy industry, the productivity : wage ratio varied greatly between industries. The average wage per worker increased more rapidly than productivity in coal, oil extraction, coking chemicals and non-ferrous metals extraction, but less rapidly in other industries:

	<i>Increase in output per worker (per cent)</i>	<i>Increase in average wage per worker (percent)</i>
All Narkomtyazhprom	26.1	23.2
District power stations	43.0	21.2
Coal	16.0	19.7
Oil extraction	0.8	19.4
Oil processing	29.3	28.8
Iron and steel	25.2	23.5
Iron ore	30.8	23.9
Coking chemical	16.2	19.0
Non-ferrous metals (extraction)	19.4	22.7
MCMW	23.1	22.0
Chemicals	23.7	23.3

Source: *Tyazhelaya promyshlennost' 1936* (1937), 149–50, 187–206.

The reductions in costs eased the pressure on the state budget and on currency issue. But budgetary expenditure in 1936 considerably exceeded the plan. The achievement of adequate budgetary revenue required constant effort, and involved the enforcement of quite drastic measures, including the decision to maintain the supply of flour to bakeries and to the population in spite of the very poor harvest. In the calendar year as a whole, the sale of flour amounted to 13,227,000 tons, and was greater in the fourth quarter than in any of the previous quarters.¹⁵³ Peasant grain stocks in the USSR as a whole were

¹⁵³ *Osnovnye pokazateli*, December 1936, 258–9.

estimated to have declined from 82.7 kilograms per peasant on December 31, 1935, to 61.7 kilograms on the same date in 1936.

In 1936 as a whole, currency issue exceeded the plan, amounting to 1,546 million rubles as compared with the planned 1,300 million. But the rate of increase, 15.5 per cent, was less than in 1935 (25.5 per cent), when the price increases resulting from the abolition of rationing put exceptional pressure on the currency.

(J) THE AGRICULTURAL CRISIS AND ITS SOLUTION

The regional NKVDs and other authorities made numerous attempts to estimate the extent to which the grain yield was lower than in the previous year. For example, on October 13, 1936, the Voronezh NKVD reported that in various districts the yield had varied between 3.8 and 4.4 tsentners as compared with 9.1 in 1935.¹⁵⁴ At the end of October a report from West Siberia listed 14 districts in which the harvest had been very poor, giving yields between 4 and a mere 0.9 tsentners.¹⁵⁵ In the North Caucasus, in the eleven districts in which the harvest had been worst, about half the winter wheat had perished, and in those areas where some grain had been grown the yield was only 3 tsentners.¹⁵⁶ In the Ivanovo region, in the worst-hit areas the yield had been only a little above 2 tsentners.¹⁵⁷

While the regional NKVD agencies were submitting these pessimistic reports, TsGK (the Central State Commission for assessing the harvest), managed by Osinsky, and MGK (its local inter-district agencies), were collecting materials which led to a similar result.¹⁵⁸ Data for 45 'inter-districts' were collected for October 1, 1936, and aggregating these, the national yield amounted to 6.8 tsentners per hectare and the sown area to 99.2 million hectares, giving a harvest estimate of 67.6 million tons.¹⁵⁹ The political authorities naturally considered that this was far too pessimistic, and TsGK was required to re-examine it. TsGK convened a meeting for November 5, 1936, with the task of making a final assessment of the harvest. Three days

¹⁵⁴ TSD, iv (2002), 851.

¹⁵⁵ TSD, iv (2002), 863.

¹⁵⁶ TSD, iv (2002), 887–8 (report as of November 16).

¹⁵⁷ TSD, iv (2002), 891 (report as of November 20).

¹⁵⁸ For the establishment of TsGK, see vol. 5 of this series, pp. 243–4.

¹⁵⁹ GARE, 7589/1/109, 1–45.

before the meeting, on November 2, Osinsky sent a memorandum to Molotov informing him of its likely consequences.¹⁶⁰ He reported that they had concluded that the yield was 8.7 tsentners a hectare and the production was 5,500 million puds (90.1 million tons). According to Osinsky, there were three reasons for making this increase. First, the data on mass threshings received by the kolkhozy on October 1 gave an indicator of not 6.8 but 7.2 tsentners per hectare. Secondly, this was based on incomplete data, and needed to be adjusted upwards to 7.4 tsentners to reflect the whole area of the USSR. Thirdly, according to Osinsky, an additional 1.5 tsentners per hectare needed to be added to account for losses in harvesting, and to allow for grain consumed by livestock grazing in the grain fields. The total therefore came to 8.7 tsentners per hectare.

This was a considerable concession to an optimistic view, and it is not surprising that the meeting did not settle the matter, and discussions dragged on throughout November. A further meeting on November 28, 1936, reached a more realistic evaluation: 7.6 tsentners per hectare and a production of 4,738 million puds (77.6 million tons). Osinsky sent a note to Stalin and the Politburo with this evaluation on December 7, 1936. He explained that the initial evaluation was 5.9 tsenters per hectare, and an upwards correction of 1.7 tsenters per hectare had been added. The Osinsky note was addressed to Stalin and does not appear to have been sent to Molotov. Molotov eventually got to hear about it, and on January 13, 1937, his assistant Moiseev telephoned Osinsky's deputy Bryukhanov with an urgent request for a copy of the papers. These were duly dispatched, with a note from Bryukhanov stating that in the period since these materials had been sent to the Politburo there had been protests from eight regions demanding that their harvest evaluations be further reduced.¹⁶¹

The revised TsGK estimate was of course objectively too high. But it did not satisfy the Politburo, which, on March 21, 1937, approved a draft Sovnarkom decree closing down TsGK

¹⁶⁰ See GARE, 5466/82/53, 42–39, 'Spravka dlya tov. V.M. Molotov'. The document is correctly dated November 2, 1936, but the year has been mistakenly changed to 1937 and it has been wrongly filed under this year.

¹⁶¹ GARE, 5466/82/53, 51. The requests were from Gor'kii region for 'a significant reduction', and for the following reductions for the other regions: East Siberia 0.5 tsentners, the Tatar ASSR 0.7 tsentners, Leningrad region 1 tsentner, Karelia ASSR 1.2, Bashkir ASSR 0.9, Western region 1.1 and the German Volga ASSR 0.5.

altogether.¹⁶² It is difficult to determine how far this decision was aimed at obtaining grain estimates acceptable to the authorities and how far it was part of the general drive against 'enemies' which was now well under way. The decree rather ingenuously stated that TsGK was being closed down at the request of a number of regional agencies which felt that TsGK 'had already fulfilled its purpose in a period when the agencies of Narkomzem and TsUNKhU were weak'; its further existence could not be justified. The decree stated that in future there was to be a division in responsibility for making harvest evaluations. The determination of the average level of yield and the gross grain production (the crucial issue in grain statistics) was to be transferred to TsUNKhU. The evaluation of the size of the sown area was to be the responsibility of Narkomzem. In order to decide the MTS payment in kind, kolkhozy would be placed in a particular group of grain yield by district commissions consisting of the head of the district soviet executive committee, the plenipotentiary of Komzag, the head of the district agricultural department and the director of the MTS, with the participation of the kolkhoz concerned. A clear indication that Osinsky was in disgrace appeared in the last clause of the decree, which effectively excluded him from the commission that would determine what to do with the staff of TsGK: this consisted of Osinsky's enemies and rivals: Yakovlev (in the chair), Demchenko, Kraval' and Kleiner.

Nearly five months after this decree, on August 5, 1937, I. D. Vermenichev, who had replaced Kraval' as head of TsUNKhU after the latter's arrest on May 31, 1937, sent a report to Stalin with a preliminary estimate of the 1937 harvest. He included a table on grain production by regions which showed the 1936 harvest as 77.6 million tons, exactly the figure which Osinsky had proposed in December 1936.¹⁶³ When the grain-fodder balance for 1936/37 was compiled later, it also included a harvest of 77.4 million tons, but set out the usual *nevyazka*, this time of 11.9 million tons, so the implicit harvest was 77.4 – 11.9 or 65.5 million tons.¹⁶⁴ Our own estimate is that the 1936 harvest was approximately 56 million tons; this figure was quietly included in a Soviet statistical handbook published in 1987.¹⁶⁵

¹⁶² For the text of this decision, see TSD, v, i (2004), 186–7. The Sovnarkom decree was approved on March 25 (GARE, 7589/1/117, 83).

¹⁶³ TSD, v, i (2004), 287–93.

¹⁶⁴ RGAE, 1562/2/435, 13.

¹⁶⁵ See Davies, Harrison and Wheatcroft, eds (1994), 286–8.

In his memorandum to Stalin on August 5, 1937, Vermenichev also included an estimate of the regional distribution of the 1936 harvest. He stated that 'the harvest was good in the south and in western Siberia, but in the Volga regions, in the Orenburg and Chelyabinsk regions, in the Bashkir and Tatar ASSRs, and in the non-Black Earth zone, the yield was considerably reduced (3–4 tsentners in the east, 7 in the non-Black Earth zone)'. Other sources show that in Ukraine grain production on official estimates amounted to as much as 22.1 million tons, with a yield of 11.8 tsentners a hectare, as compared with 17.7 million tons and 9.2 million tsentners in 1935.¹⁶⁶ The contrast with the famine year 1932/33, when the Ukrainian grain harvest was only 14.5 million tons, is very striking.

Simultaneously with these discussions of the size of the 1936 harvest, in January–June 1937 the regional NKVDs and other authorities continued to report, as they had in the second half of 1936, the continuing and worsening food situation in the countryside and to a lesser extent in the towns. Although these difficulties occurred in 1937, after the main period covered in this volume, it is obviously sensible to discuss them in connection with the 1936 harvest.

Here are some examples of food problems in the first months of 1937 following the 1936 harvest. In Orenburg region (January 3), 'a considerable number of households are experiencing food difficulties', and some households have no grain whatsoever.¹⁶⁷ In the North Caucasus (January 15), in spite of a grain food loan in November 1936, serious food difficulties had now returned; the district hospital had no spare beds for those sick with hunger.¹⁶⁸ On January 16, Komzag reported that representatives from regions with a poor harvest were travelling to regions with a good harvest to buy grain at bazaars, and ruled that this was illegitimate.¹⁶⁹ On January 27, an Orenburg report, even more alarming than the report of January 3, stated that many kolkhozy had used up all the grain, and others were coming to an end of their stocks, so that the peasants were having to survive on potatoes, beetroot and other vegetables.¹⁷⁰ In Kuibyshev region (January 29), many children were invalids as a result of food

¹⁶⁶ TsDAGOU, 1/1/502, 28 (material for XIII Ukrainian party congress, May–June 1937).

¹⁶⁷ *Sovetskaya derevnya*, iv (2012), 383.

¹⁶⁸ TSD, v, i (2004), 117.

¹⁶⁹ TSD, v, i (2004), 118–20.

¹⁷⁰ *Sovetskaya derevnya*, iv (2012), 401–3.

shortage, and teachers and local rural staff also lacked food.¹⁷¹ In Voronezh region (February 2) cases were occurring of swelling up and a few deaths from hunger.¹⁷² In Leningrad region (February 5), a mass movement was taking place of collective farmers moving in from outside Leningrad.¹⁷³ By March 13, a further report from Kuibyshev region stated that food difficulties were now occurring in 60 out of its 87 districts and in seven districts 40 deaths from famine had taken place. In one village the spread of malaria resulting from food shortages had led to 27 deaths, mainly among individual peasants, and in this area food had not been supplied from the grain loan to the district even though it was only 12 kilometres from the district centre.¹⁷⁴ In Saratov region (March 27) a 25-year-old collective farmer had attempted to hang himself because he could not get food.¹⁷⁵ And so on.

These reports also noted that the flour supplies to the urban areas had often failed to keep pace with demand. In Leningrad region (February 5) huge queues for bread formed in workers' settlements.¹⁷⁶ In Gor'ky region (February 17), queues gathered from 6 or 7 a.m.¹⁷⁷ On March 3 a report from state security stated that in eight regions and ASSRs crowds were assembling at railway stations in search of bread, and that this threatened the spread of epidemics; cases of typhus fever had already appeared.¹⁷⁸ On March 28 Stalin and Molotov sent telegrams to Ukraine, the Azov-Black Sea region, and the Saratov region urging them to stabilise the grain trade, using all the grain allocated to the region and employing all their resources, not leaving things to Narkomtorg.¹⁷⁹ In the Sverdlovsk region (March 31) large queues for bread appeared in Perm and other towns. In Perm crowds of 1,000 to 1,500 people sometimes gathered, beginning to assemble at 2–3 a.m.¹⁸⁰ In Kuibyshev region (April 19) in one district a crowd of 200 had attacked a bakery, broken down the doors and taken 150 kilograms of bread rolls. In another Kuibyshev

¹⁷¹ *Sovetskaya derevnya*, iv (2012), 408–10.

¹⁷² *Sovetskaya derevnya*, iv (2012), 413.

¹⁷³ *Sovetskaya derevnya*, iv (2012), 413–14.

¹⁷⁴ *Sovetskaya derevnya*, iv (2012), 429–30.

¹⁷⁵ TSD, v, i (2004), 195–6.

¹⁷⁶ *Sovetskaya derevnya*, iv (2012), 413–14.

¹⁷⁷ *Sovetskaya derevnya*, iv (2012), 421.

¹⁷⁸ TSD, v, i (2004), 162–9.

¹⁷⁹ TSD, v, i (2004), 202–3.

¹⁸⁰ *Sovetskaya derevnya*, iv (2012), 439–40.

district the deputy director of the MTS got one of his guard to fire at the crowd. Children left school to beg for bread, and in general there was 'great dissatisfaction, scandals and fights'.¹⁸¹ Reports of urban bread shortages continued to appear until the new harvest. A telegram from Yakovlev to Stalin as late as July 21 reported that in Belorussia large queues for bread had appeared in 'all towns and district centres'.¹⁸² But by this time the new harvest of 1937 had begun to come in, and shortages began to disappear.

The grain problem affected even Ukraine, where the harvest had been successful. The stripping away of grain from Ukraine meant that the Politburo had to issue a seed loan of 75, 000 tons on January 14 and further seed loans to Odessa and Donetsk regions on March 29 (see Appendix B). But the food situation in Ukraine, as in nearly all the rest of the country, remained precarious. As early as November 1, 1936, restrictions were introduced on the sale of flour.¹⁸³ During the next few months the monthly retail supply of grain was reduced: in March 1937 only 177,000 tons of flour were issued as compared with 190,000 in December 1936.¹⁸⁴ As a result, an unofficial rationing system was introduced, to the great dissatisfaction of those not afforded priority.¹⁸⁵ As in urban areas elsewhere in the USSR, the situation did not improve until the new harvest.

The monthly mortality data prepared by TsUNKhU clearly showed the seriousness of the situation. As early as July and August 1936 mortality was 50–60 per cent greater than in the same months of 1935, with the increase being greater in the countryside than in the towns.¹⁸⁶ By July 1937, with the advent of the new harvest, the difficulties were over.

¹⁸¹ TSD, v, i (2004), 235.

¹⁸² TSD, v, i (2004), 272–3.

¹⁸³ TsDAGOU, 1/20/7164, 103.

¹⁸⁴ TsDAGOU, 1/20/7164, 26, 38, 48.

¹⁸⁵ TsDAGOU, 1/20/7164, 4, 35.

¹⁸⁶ Number of deaths, July and August 1935–37 (thousands):

	<i>Total</i>	<i>Urban</i>	<i>Rural</i>
July 1935	167	48	121
July 1936	273	67	206
July 1937	204	67	138
August 1935	208	47	161
August 1936	316	72	244
August 1937	230	62	168

Although the food difficulties after the 1936 harvest were very considerable, they bore no comparison with the consequences of the 1932 harvest. In the first six months of 1933, millions of peasants died of hunger. In the same period of 1936 and 1937, although the 1936 harvest was almost certainly as poor as that of 1932, deaths from hunger and malnutrition were far less. How did this come about?

There were two main reasons. First, the grain collections were less than had originally been planned, and so the pressure on the peasants was less than in 1932/33. The state in the course of a long series of decisions reduced the plans for the most affected areas. These relaxations were normally imposed by decisions at a regional level endorsed by the Politburo. For the region concerned, it reduced the grain delivery plans, and the plans for the so-called taxation in kind exacted for use of the MTS services. It also permitted the region to allow kolkhozy to delay the repayment of past grain loans they had received, and to cancel others. But even the reduced plans were underfulfilled. It was shown in Chapter 11 that 2.5 million tons less grain was collected as compulsory deliveries than in the previous year.

In the early months of 1937, the authorities also sought to collect in *zakupki* as planned. On February 16 the Politburo ruled that with effect from February 1 the regional authorities could retain 20 per cent of the *zakupki* collected in by Zagotzerno, 'using this deduction to sell grain to the population at state prices',¹⁸⁷ But eventually only 2 million tons were collected, as compared with 3.57 million in 1935/36. So the total grain collections amounted to only 25.5 million tons, 4 million tons less than the 29.6 million collected in the previous year.

The second factor in avoiding mass starvation, in addition to reducing the grain collections, was the issue by the state of grain loans to the regions, which the region divided up among their districts. These loans came either directly from the so-called transitional grain stocks held by Komzag, or were transferred to Komzag from the *nepfond* held by the Committee of Reserves.¹⁸⁸ While Stalin was on leave in 1936, only three cases were recorded of the issuing of

¹⁸⁷ TSD, v, i (2004), 143.

¹⁸⁸ On two occasions the authorities transferred large amounts of grain from the Committee of Reserves to Komzag. On June 22, 1936, the Politburo transferred 50 million puds of wheat, 20 of rye and 20 of other grains, 100 million puds (1.64 million tons), to be used where required; these were supposed to be returned in June and July from the 1936 harvest (RGASPI, 17/162/19, 19). On May 4, 1937, it transferred 50 million puds of rye and wheat (819,000 tons) to be returned in August and September from the 1937 harvest (RGASPI, 17/162/21, 33).

grain loans (to Kirov region on August 21, to North Caucasus on August 27, and to Gor'ky region on October 9) (see Appendix A). But, as is shown in Appendix B, in the course of the agricultural year 1936/37 no fewer than 120 decisions to provide grain loans were taken by the Politburo. The Politburo was forced by the grain shortages to issue loans against its will. On January 20 it ruled that no further requests for seed, food and fodder loans should henceforth be submitted to Sovnarkom or the central committee.¹⁸⁹ But within four weeks such loans began again to be issued (see Appendix B). As in all other years, seed loans predominated: the arrangements for grain collections had the curious result that so much grain was taken by the state that sowing could be carried out only by reissuing the grain already collected in, sometimes to different regions, but often to the region from which the grain had been collected.

The most important grain issues were of course those made available for food. These amounted in 1936/37 to 633,000 tons, 399,000 in October–December 1936, 102,000 in January–March 1937, and 132,000 in April–July. Most of these decisions were taken in April–July, though the average amount issued by each decision was smaller than earlier in the year. Of the 65 decisions to issue food loans, no fewer than 41 were approved in April–July.

In total, as is shown in Appendix B, grain loans amounting to 3.989 million tons were issued, including 2.724 million tons of seed loans, 633,000 tons of food loans, and 377,000 tons of fodder loans. This compares with grain loans amounting to 1.761 million tons in 1934/35 and 1.511 million tons in 1935/36. As compared with 1935/36, the grain deficit in 1936/37 amounted to over 6 million tons (an additional 4 million tons from the deficit in the grain collections, and additional grain loans amounting to over 2 million tons).

The most striking difference between the situation in 1936/37 and in all previous years since 1932/33 is that the grain deficit was met by drawing down the state grain stocks. Even in the famine year 1932/33, the very low grain stocks were apparently increased during the year, and in the three following years state stocks were built up from just under 2 million to the huge figure of 9.4 million on July 1, 1936. But in 1936/37, state stocks were reduced by nearly 4 million tons, from 9.45 to 5.45 million tons. It is no exaggeration to claim that the availability of these stocks, and the decision to draw on them

¹⁸⁹ See TSD, v, i (2004), 120.

so drastically, was crucial in avoiding a famine which could well have resulted in the deaths of as many millions of peasants as in 1933.

The poor grain harvest naturally resulted in serious difficulties to livestock farming. The regional NKVD and other reports frequently noted that the shortage of fodder had led to the sale of some animals, particularly those individually owned by collective farmers. Thus the report of the Kirov region NKVD, referring to the situation on January 11, 1937, stated:

In a number of districts ... as a result of the partial harvest failure and the consequent shortage of fodder for animals, the discarding and death of animals was so considerable that it became a real threat not merely to the fulfilment of the livestock plan but even led to the reduction in the number of livestock and working animals.

Horses had become unfit for work and thousands of animals had died.¹⁹⁰

The annual census of livestock on February 1, 1937, presented by TsUNKhU to Stalin and Molotov, showed clearly the effect of the bad harvest on this important sector of agriculture.¹⁹¹

Percentage increase or decrease in number of livestock, 1934–36

	1934	1935	1936
Horses: all year	-2.8	+3.9	+2.2
January–June	+1.9	+6.3	+7.3
July–December	-4.6	-2.3	-4.5
Cattle: all year	+15.9	+18.2	+3.4
January–June	+26.5	+26.7	+23.3
July–December	-8.4	-6.6	-16.1
Sheep and goats: all year	+11.7	+22.4	+7.7
January–June	+42.3	+49.7	+47.6
July–December	-21.5	-18.3	-27.1
Pigs: all year	+48.8	+51.3	-21.9
January–June	+51.7	+31.7	+17.6
July–December	-1.9	+14.9	-33.5

¹⁹⁰ *Sovetskaya derevnya*, iv (2012), 394–6. Typically, this report also blamed the shortage of fodder onto inefficiency.

¹⁹¹ The following data are all taken from the report from Kraval', head of TsUNKhU, to Stalin and Molotov, sent on April 14, 1937 (TSD, v, i (2004), 218–30).

The table shows the healthy development of the livestock sector in 1934 and 1935, following the enormous decline in 1929–33. Even the number of horses increased in 1935, in spite of the fact that they were being gradually replaced by mechanical power. The seasonal pattern was of course that the number of animals increased in the first half of every year, partly because of the birth of new animals early in the year, and then declined in the autumn and early winter, when animals were slaughtered for food, for sale, or for supply to the state as compulsory deliveries. Even in 1936, in spite of the bad harvest, the number of animals continued to grow in the year as a whole (except in the case of pigs), but at a much slower pace. The slower pace was entirely due to the rapid decline in the second half of the year following the bad harvest. The TsUNKhU report set this out clearly:

The most important factor exerting a negative influence on the development of livestock in the USSR was that the harvest of grain and fodder crops was smaller than in the previous year in a number of regions, mainly in the northern and Volga zones.

The particularly rapid decline in the case of pigs was because their survival depended on both fodder and potatoes, the harvest of which was also very poor in 1936, accompanied by the spread of diseases.

The livestock census also showed that the animals worst affected were those owned by individual peasants, which declined precipitately, by sovkhozy, and by individual collective farmers. while the number of socialised animals in the kolkhozy still increased substantially.¹⁹²

The TsUNKhU report devoted a great deal of space to the alleged inefficiency of the local authorities and of the farm units in handling the available fodder.¹⁹³ The report also made an important practical suggestion: that as much attention should be devoted each year to

¹⁹² See table in the TsUNKhU report, p. 222.

¹⁹³ Although the major repressions of 1937–38 were now well under way in the USSR as a whole, the report contained only a couple of lines on ‘wrecking’, merely commenting that the faults were ‘connected with wrecking in the livestock sector and bad management bordering on wrecking’. The TsUNKhU report was sent to Stalin and Molotov in April 1937. The series of purges which eliminated all the main actors in agriculture in the party and the state, and many of the minor actors, did not begin seriously until June 11, 1937, with the arrest of F. A. Tsil’ko, a long-established deputy head of Narkomzem: 70 leading agricultural officials were arrested in the next ten days.

the establishment of stocks of crude fodder (as distinct from fodder grains) as the stocks of grain seed. This was 'in order to avoid the situation in which in years of poor harvest in a number of areas because of the lack of crude fodder the straw roofs of sheds and other buildings of the collective farmers are used by the kolkhozy'.

The premature slaughter of livestock led to a sudden rapid growth in 1937 of the amount of meat on sale; the increase was most rapid in the sales by collective farmers of their individually-owned animals.¹⁹⁴

In other sectors of agriculture, which did not depend on the grain and potato harvest, the results were much more favourable. The cotton crop in 1936 was greeted in the press with great enthusiasm. On November 15, *Pravda* reported that the harvest and the collections of the cotton crop were a month ahead of schedule, amounting to 1.878 million tons. Eventually the crop amounted to 2.39 million tons, 39.8 per cent greater than in 1935 and the largest crop so far ever achieved. The sugar-beet harvest was also the largest so far, amounting to 16.83 million tons, 3.8 per cent greater than in 1935 (see Table 30).

¹⁹⁴ RGAE, 1562/83/39, 18–27.

APPENDIX A

Communications between Stalin and Moscow on grain questions, 1936

	<i>Region</i>	<i>Proposal from region</i>	<i>Proposal from Moscow (usually Kaganovich and Molotov)</i>	<i>Decision by Stalin</i>
August 18	Moscow	Reduce collections by 9.5 million puds	Reduce deliveries by 6.8 million puds	Reduce by 8 million puds
August 18	Chelyabinsk	Reduce collections by 13.774 million puds	Reduce by 5.81 million puds	Reduce by 8.5 million puds
August 21	Kazakhstan	Reduce deliveries by 5.65 million puds	Reduce by 3.575 million puds	Agreed
August 21	Kirov	Postpone collections by 6 million puds; provide seed loan of 0.5 million puds	Postpone deliveries by 2.5 million, reduce MTS payment in kind by 0.5 million, provide seed loan in rye of 0.3 million	Agreed
August 21	Gor'kii	Reduce deliveries by 1.5 million	Reduce by 1 million	Agreed
August 27	Kursk	Reduce deliveries by 3 million, MTS payment in kind by 6 million	Reduce deliveries by 3 million, MTS payment by 3 million	Agreed

Appendix A (Continued)

	<i>Region</i>	<i>Proposal from region</i>	<i>Proposal from Moscow (usually Kaganovich and Molotov)</i>	<i>Decision by Stalin</i>
August 27	North Caucasus	Provide seed loan 1.76 million, food and fodder loan 0.3 million	Seed loan 1.385; refuse food and fodder loan	Agreed
September 5	Azov-Black Sea	Provide seed, fodder and partly food loan of 5 million	5 million, issuing 0.5 for seed now, the rest after maize delivery plan fulfilled	Agreed
September 11	Bashkir	Reduce grain deliveries by additional 11.5 million, MTS payment in kind by additional 3.4 million	Reduce deliveries by 5.133 million, reject reduction of payment in kind	Agreed, but give payment in kind reduction of 3 million ¹
September 12	Stalingrad	Reduce collections by 15.388 million	Reduce by 12 million, including reduction of payment in kind by 6 million ('claims are exaggerated')	Agreed
September 30	Voronezh	Postpone deliveries of 4 million puds, reduce payment in kind by 7 million, postpone debt on past	Postpone deliveries of 2 million, reduce payment in kind 7 million, postpone 1 million of	Agreed

(Continued overleaf)

Appendix A (Continued)

	<i>Region</i>	<i>Proposal from region</i>	<i>Proposal from Moscow (usually Kaganovich and Molotov)</i>	<i>Decision by Stalin</i>
October 2	Kursk	payment in kind by 3.47 million, and debt on seed loan by 1.5 million (15.97 in all) Reduce collections by 8.897 million (deliveries by 2 million, payment in kind 4.762, postpone debt on past payment in kind 1.762, postpone debt on past loans by 0.5)	debt on payment in kind and 1.2 million of debt on seed loan (12 million in all) Reduce by 5.9 (payment in kind 3.7, deliveries 1, postpone debt on past payment in kind 1, postpone debt on past loans 0.2)	Agreed
October 9	Sverdlovsk	Reduce collections by 10.5 million (deliveries by 3.8 million, payment in kind 4.5, postpone payment in kind 1, postpone debt on past loans by 1.2)	Reduce by 7.8 (deliveries 2, payment in kind 4, postpone payment in kind 0.8, postpone debt on past loans 1)	Harvest was good, claims poorly grounded – give maximum reduction of 5 million
October 9	Bashkir	Reduce deliveries by 6 million, postpone	Reduce deliveries by 5 million, postpone	Agreed

Appendix A (Continued)

	<i>Region</i>	<i>Proposal from region</i>	<i>Proposal from Moscow (usually Kaganovich and Molotov)</i>	<i>Decision by Stalin</i>
		payment in kind and payment in kind debt 1.445, postpone debt on loan 0.6	payment in kind 0.7 and payment in kind debt 0.3, postpone debt on loan 0.6	
October 9	Saratov	Reduce collections by 6.6 million (deliveries by 1.8 million, deliveries by sovkhozy 1, payment in kind 2.5, postpone payment in kind 1.3)	Reduce by 4 (postpone deliveries 1, reduce payment in kind 2, postpone payment in kind 1, postpone debt on past loans 1)	Agreed
October 9	Kirov	Reduce collections by 5 million (deliveries by 2.5 million, payment in kind 2.5)	Postpone deliveries 1.5, reduce payment in kind 2	Agreed
October 9	Gor'kii	Reduce deliveries by 0.18, reduce payment in kind by 1.77, provide grain loan of 4.158, return to	Postpone deliveries by 0.18, reduce payment in kind 1.5, provide 3 million rubles loan. Postpone grain loan to	Agreed

(Continued overleaf)

Appendix A (Continued)

	<i>Region</i>	<i>Proposal from region</i>	<i>Proposal from Moscow (usually Kaganovich and Molotov)</i>	<i>Decision by Stalin</i>
		kolkhozy 0.6 million overpaid, provide monetary loan of 3 million rubles to assist kolkhozy	first quarter of 1937, agreeing in advance to issue 0.6 million loan to kolkhozy	
October 24	North Caucasus	Reduce collections by 6.283 million (postpone deliveries by 1.315 million, reduce payment in kind 3.135, postpone payment in kind 1.233, postpone debt on past payment in kind 0.6)	Reduce collections by 3.2 million (postpone deliveries by 0.5 million, reduce payment in kind 2, postpone payment in kind 0.5, postpone debt on past payment in kind 0.2)	No reply recorded (departed for Moscow)
October 24	Chelyabinsk	Reduce collections by 13.893 million (reduce deliveries 0.25, reduce taxation in kind 7.343, reduce sovkhoz collections 6.3)	Reduce collections by 9.8 million (reduce deliveries 0.1, reduce taxation in kind 4.2, reduce sovkhoz collections 5.5)	No reply recorded (departed for Moscow)

Source: SKP.

Note: ¹ Proposes this on September 12 because Stalingrad region given reduction of payment in kind (see following entry).

APPENDIX B

Grain Loans by the State from the 1936 Harvest (million puds unless otherwise stated)

	<i>Region</i>	<i>Seed</i>	<i>Food</i>	<i>Fodder</i>	<i>Source</i>
August 3, 1936	Voronezh ¹				RGASPI, 17/162/20, 37
August 3	Bashkiria ²	1.5 rye			162/20, 37
August 5	Kuibyshev	1.18			162/20, 38
August 10	Far East Army			15 th. tons (0.92 million puds) from KR	162/20,44
August 10	Far East Army			40 th. tons from current resource (2.44 m puds)	162/20, 44
August 10	Orenburg	1 rye			162/20, 45
August 12	Western	1			162/20, 46
August 22	Kirov	0.3 rye			162/20, 57
August 28	Tatar	3.5 th. tons rye ³ (0.214 m puds)			162/20, 61–62

(Continued overleaf)

Appendix B (Continued)

	<i>Region</i>	<i>Seed</i>	<i>Food</i>	<i>Fodder</i>	<i>Source</i>
August 28	N Caucasus	1.385			RGASPI, 17/3/980, 71
September 5	Azov-Black Sea	5 ⁴			162/20, 69
September 7	Krasnoyarsk	5.1 th. tons rye (0.311 m puds)			162/20, 70
September 11	Kursk	6 th. tons rye (0.366 m puds), 4 th. tons winter wheat (0.244 m puds)			162/20, 75
October 28	Kursk	18	4	2	162/20, 112
November 21	Tatar	6	0.25		162/20, 122– 123
November 28	Orenburg	8	1	0.75	162/20, 128
December 17	Chelyabinsk	13.5	3	2.5	
	W Siberia	5.5	0.5		
	Moscow	7	2.5	1.5	
	Kazakhstan		8		
	Saratov	12.5	4	3	162/20, 132,
	Omsk	6.5	0.3	0.8	149–151
	Sverdlovsk	6			
	Kirov and Udmurtia	6.97	2	1	
December 19	Voronezh	11	1.5	1.5	162/20, 134

December 28	Stalingrad	6	0.3	0.3	
	Kalinin	1.2	0.3		
	Gor'kii	2.35	1.2	0.8	162/20, 154–
	Kursk	8	3.4		155
	E Siberia	1.9	0.1		
Total August– December 1936 (m puds)	IN ALL 182.78 (including 13 not attributed to single heading)	127.92	24.35	17.51	
Total August– December 1936 (th. tons)	IN ALL 2994 (including 213 not attributed to single heading)	2095	399	287	
January 2, 1937	Kursk	1.5	0.6	2.5	162/20, 157
January 14	Ukraine	4.6			162/20, 161
January 19	Georgia	1.05 th. tons (.064 m puds)			17/3/983, 31
January 20	Leningrad	1.6	1		
	Azov-B Sea	1			
	North and Komi	1.2		0.3	
	Sverdlovsk		0.2		
	Yaroslavl'	1.5			
	Uzbekistan	0.61			162/20, 163–
	Kazakhstan		0.5		165
	Tatar		1		
	Kirgizia	0.24			
	Ivanovo	1			
	Kirov	0.24			
January 20	Narkomsovkhozov	13			17/3/983, 37, 53
(Continued overleaf)					

Appendix B (Continued)

	<i>Region</i>	<i>Seed</i>	<i>Food</i>	<i>Fodder</i>	<i>Source</i>
January 20	Narkomzem	1			17/3/983, 37, 53
February 7	Kirov		Stalin and Molotov permitted obkom to use 0.6 m puds of food loan for seed		TSD, iv (2002), 137
February 9	Far East		20 th. tons from grain in stock in Far East (1.221 m puds)		162/ 20, 178 (Blyukher and Krutov proposal to buy grain abroad rejected)
February 16	Narkompishcheprom sovkhozy	22 th. tons (1.343 m puds)			17/3/983, 82
February 16	Krasnoyarsk	0.5			17/3/983, 83
March 11	Ivanovo		2 th. tons (0.022 m puds)		17/3/984, 22
March 11	Narkomsovkhozov		2.5		17/3/984, 23
March 11	Saratov			4 th. tons hay (0.244 m puds)	17/3/984, 23
March 11	Western			5 th. tons hay (0.305 m puds)	17/3/984, 24
March 13	Tatar	0.7		0.156 oats (exchange for millet and rye)	17/3/984, 30
March 16	Kuibyshev		0.5		17/3/984, 34
March 17	Stalingrad		0.2		17/3/984, 36

March 21	Tatar			3 th. tons (0.183 m puds)	
	Yaroslavl'	0.7			
	North	0.25			
	Sverdlovsk	1.02			17/3/985,
	Voronezh	0.72			15-16
	Azov-B. Sea			0.2 concentrated fodder	
	Ivanovo	0.3		0.3 and provide 0.3 for sale	
March 29	Krasnoyarsk	0.6			
	Ukraine	0.72 ⁵			17/3/985, 22
Total January-March 1937 (m puds)	IN ALL 46.09	34.41	6.24	3.94	
	<i>(including 1.5 not attributed to single heading)</i>			<i>(excluding hay)</i>	
Total January-March 1937 (th. tons)	IN ALL 752	560	102	65	
	<i>(including 25 not attributed to single heading)</i>				
April 1	Kalinin			0.1	17/3/985, 31
April 1	Marii	5 th. tons (0.305 m puds)			17/3/985, 31
April 2	Azov-B.Sea	0.3 th. tons khleshchevitsa (0.018 m puds)			17/3/985, 33
		0.4 th. tons millet (0.024 m puds)			
April 4	Udmurtia			0.1	17/3/985, 36
April 5	Voronezh		1	0.5	17/3/985, 38

(Continued overleaf)

Appendix B (Continued)

	<i>Region</i>	<i>Seed</i>	<i>Food</i>	<i>Fodder</i>	<i>Source</i>
April 7	Moscow	0.5		1	17/3/985, 38
April 7	Western		0.2		17/3/985, 38
April 9	Moscow	0.5 oats			17/3/986, 5
April 9	Kirov ⁶		0.5		17/3/986, 6
April 9	Ukraine		0.5 rye ⁷	0.3	17/3/986, 6
April 13	Omsk		0.1		17/3/986, 12
April 13	Sverdlovsk		0.2	0.3	17/3/986, 12
April 14	Yaroslavl'		5 th. tons rye (0.305 m puds)		17/3/986, 14
April 21	Azov-B.Sea		0.3		17/3/987, 9
April 24	Azov-B. Sea	1.8 th. tons (0.110 m puds)			17/3/987, 12
April 24	Stalingrad	2 th. tons (0.122 m puds)			17/3/987, 12
April 27	North	4.437 th. tons ⁸ (0.271 m puds)			17/3/987, 18
April 27	Dnepropetrovsk	1.2 th. tons millet for resowing (0.073 m puds)			17/3/987, 18
April 29	Narkomsovkhozov	2.36 th. tons (0.144 m puds)			17/3/987, 22
May 4	Tatar		1.5 th. tons (0.092 m puds)		17/3/987, 23
May 4	Donetsk	10 th. tons (0.611 m puds)			17/3/987, 26
May 10	Voronezh	0.23 for resowing	0.5		17/3/987, 35
May 10	Chelyabinsk		0.058 ⁹		17/3/987, 35

May 10	Kursk		1 th. tons (0.061 m puds) ¹⁰		17/3/1987, 36
May 10	Krasnoyarsk		2 th. tons (0.122 m puds) ¹¹	2 th. tons (0.122 m puds) ¹²	17/3/1987, 36
May 10	Gor'kii	3 th. tons (0.183 m puds)			17/3/1987, 36
May 13	Stalingrad		1 th. tons (0.061 m puds)		17/3/1987, 55
May 17	Azov- B.Sea		0.1 for needy kolkhozy		17/3/1987, 65
May 17	Kuibyshev		0.2		17/3/1987, 65
May 17	Mordovia	0.35 th. tons millet (0.021 m puds)	1 th. tons (0.061 m puds)	0.5 th. tons (0.030 m puds)	17/3/1987, 66
May 21	Kirov	0.5			17/3/1987, 69
May 21	Omsk		0.1		17/3/1987, 81
June 1	Kalinin		0.25		17/3/1987, 102-104
June 1	Ivanovo	0.02 grechikha	0.1	0.05	17/3/1987, 107-109
June 1	Leningrad	0.025 oats or barley for resowing ¹³	0.18	0.1	17/3/1987, 109-111
June 2	Sverdlovsk	4 th. tons (0.244 m puds)	4 th. tons (0.244 m puds)		17/3/1987, 113
June 2	Voronezh		0.3		17/3/1987, 113
June 5	Northern		0.12		17/3/1987, 200
June 5	Mariiskaya		0.1		17/3/1987, 206
June 5	Gor'ky		0.2		17/3/1987, 212
June 5	Kirov		0.5		17/3/1987, 215
June 5	Chuvash		0.2 plus 1 th. tons for sale (0.073 m puds)		17/3/1987, 218
June 11	Mordovia		0.2		17/3/1987, 221

(Continued overleaf)

Appendix B (Continued)

	<i>Region</i>	<i>Seed</i>	<i>Food</i>	<i>Fodder</i>	<i>Source</i>
June 11	Udmurtia		0.22		17/3/987, 227
June 13	Orenburg		?		17/3/987,
June 15	Stalingrad		?		17/3/987,
June 19	Saratov		1 th. tons (0.061 m puds)		17/3/988,
July 1	Omsk		0.05		17/3/989, 19
July 1	Voronezh		0.2		17/3/989, 19
July 5	Tatar		0.2		17/3/989, 31
July 5	Chelyabinsk		0.1		17/3/989, 32
July 5	Kazakhstan		0.1		17/3/989, 33
July 5	Sverdlovsk	0.3 rye ¹⁴	0.2		17/3/989, 96
July 5	Komi			0.035	17/3/989, 100
July 14	Orenburg		0.03 from new harvest		17/3/989, 51
July 14	Bashkir		0.2		17/3/989, 120
Total April-July 1937 (m puds)	IN ALL 14.828 (including 1.135 not attributed to single heading)	4.201	8.088	1.502	
Total April-July 1937 (th. tons)	IN ALL 243 (including 18 not attributed to single heading)	69	132	25	
TOTAL in m puds	243.70	166.53	38.68	22.95	
TOTAL in th. tons	3989	2724	633	377	

General note: These figures are roughly confirmed by the annual grain–fodder balance for 1936/37. This shows seed loans and assistance amounting to 2,818 thousand tons, and food and fodder loans jointly as 1,034 thousand tons, a total of 3,870 thousand tons.

The Politburo decisions about grain are recorded in a more confusing fashion than in earlier years. In earlier years, all decisions were recorded in puds except grain exports, which were recorded in tons. In 1936/37 many decisions were recorded in tons; we have not managed to distinguish a logical pattern about this.

There was also a change in the middle of the year in the level at which decisions were adopted. In previous years, all decisions about grain loans and related matters formed part of the top-secret ‘special papers’, which were circulated only to a limited number of Politburo members (RGASPI, 17/162). These decisions were carefully concealed from regional parties who were not affected by them. It will be seen from the above that this was the practice until the end of 1936. In January 1937 some decisions were taken as part of the more-generally circulated but still secret decisions (RGASPI, 17/3). From February 16 onwards all grain decisions were recorded as secret but not top-secret. This may be because, as Appendix A shows, the inner group of Politburo members accepted them more or less automatically; effectively they were the responsibility of Kleiner and Chernov. But trust in Kleiner and Chernov did not last long; the accusations of conspiracy against them, which resulted in their execution, will be discussed in vol. 7.

Notes:

¹ All requests for seed loan for autumn sowing rejected.

² In exchange for other crops.

³ 1500 of this is in exchange from other crops.

⁴ 0.5 for autumn sowing to be issued at once; remainder after maize delivery plan completed.

⁵ All other requests refused.

⁶ Rejected as ‘not serious’: claim for 5.5 million puds of seed, food and fodder

⁷ Plus sell them extra 5 th. tons in April.

⁸ 3,347 of this from reduction of exchange of crops.

⁹ To be sold to needy individual peasants and collective farmers without tax.

¹⁰ For Ukrainian settlers.

¹¹ From deduction to region from *zakupki*.

¹² Sell at state prices with loan of 1 million rubles.

¹³ Due to hurricane.

¹⁴ For western districts lacking good seed.

CONCLUSIONS

The three years 1934–36 were the years of the most rapid expansion during the second five-year plan. This was also a period of relative political moderation, in spite of the dramatic murder of Kirov which took place at the end of 1934.

The XVII party congress at the beginning of 1934 launched an effort, endorsed by Stalin, to combine peaceful relations within the party with the recognition by Stalin's former opponents and critics that his policies had been correct and had greatly advanced the cause of socialism. At the congress Kaganovich stated 'we are in more normal times', and Kirov declared that 'the basic difficulties are behind us'. Such former oppositionists as Bukharin and Preobrazhensky declared their support for the leadership, and Preobrazhensky was readmitted to the party. The congress strongly emphasised the radical improvement in the standard of living which would now take place, and the forthcoming growth of education and the health services. Stalin insisted on the importance of the growing collaboration between the USSR and France, and the improved relations with the USA and Poland.

Political developments during the next three years were complicated and contradictory. The growing threat of war increasingly influenced the decisions of the Soviet authorities. An important moment in these developments was the publication in *Pravda* on March 31, 1935, of Tukhachevsky's vigorous attack on German 'revanchist aggressive policies', endorsed and edited by Stalin (see p. 91 above). Strong measures were taken to defend the frontier districts militarily and by substantial transfers of the Soviet population. A year later the outbreak of the Spanish civil war greatly increased international tension and tension within the Soviet Union. With the Kamenev–Zinoviev trial in July–August 1936 and the appointment of Yezhov as head of the NKVD in September 1936, Soviet politics entered a new and much darker stage.

But throughout these three years the economy grew at a remarkable rate. In 1933, according to official figures, industrial production had increased by only 5.5 per cent, and in 1937 by 11.2 per cent, but in each of the years 1934–36 it increased between 19 and 29 per cent. The reasons for the slow increase in 1933 were discussed in

volume 4 of this series; the decline in the rate of growth in 1937 will be discussed in volume 7.¹

The economic objective of the second five-year plan was to strengthen further the industrial might of the Soviet Union by expanding the 'Group A' producer goods' industries, while at the same time greatly increasing the supply of food and consumer goods from the 'Group B' industries after their lag during the first five-year plan and dramatic deterioration during the crisis and famine of 1932–33. To enable the standard of living to double or treble during 1933–37, Group B industries were planned to increase by 18.5 per cent a year, and Group A by 14.5 per cent.

The plan nominally covered the years 1933–37, but it was effectively launched a year late when it was approved by the XVII party congress. The years 1934–36 were an important and perhaps decisive stage in Soviet development. Industry, consolidating and assimilating the huge investments undertaken during the first plan, roughly doubled in size. According to Soviet statistics, output increased by 121 per cent in the five years between 1932 and 1937, while Western estimates of the increase range between 62 and 116 per cent.² Group A industry increased more rapidly than Group B industry, reversing the proportions proposed in the plan: according to Soviet figures, Group A increased by 139 per cent, while Group B approximately doubled. The slower expansion of Group B than planned resulted partly from the diversion of investment to other sectors of the economy and partly from the failure of agriculture to increase its supply of foodstuffs and industrial raw materials as much as planned. The increase in agricultural production was nevertheless very substantial. The accumulation of grain stocks enabled the economy to survive the very poor harvest of 1936 without a serious famine, and even in 1936 the harvest of sugar beet, cotton and flax was greater than in 1913. But the livestock sector, after its collapse in the early 1930s, failed to recover to the level it had reached in 1928, and the supply to industry of meat and dairy products, and of wool, leather and

¹ This chapter includes some results for 1937, although this year will be examined in detail in vol. 7. Data comparing the beginning and end of the five-year plan (1932 and 1937) are fairly consistently available, while comparisons of 1932 and 1936 are sometimes not available.

² See Davies, Harrison and Wheatcroft, eds (1994), 292–3.

other raw materials was far less than stipulated in the second five-year plan.³

Transport, especially railway transport, expanded rapidly. Priority was given to freight: freight carried by the railways increased by 91 per cent between 1932 and 1936, and by 110 per cent by 1937, while railway passenger transport declined by 8.8 per cent between 1932 and 1936, and increased by a mere 8.6 per cent by 1937.⁴

No second five-year plan was ever approved for the defence sector. During these years, and especially in 1936 and 1937, with the increasing threat from the fascist powers, both the armaments' industries, classified as part of Group A industry, and the armed forces, financed through Narkomoborony, commanded an increasing share of industrial and other resources. The production of the armaments industries reached 237 per cent of 1932 by 1936, and more than trebled between 1932 and 1937, increasing from about 12 to about 18 per cent of all Group A production.⁵

Expenditure on the maintenance of the armed services also increased rapidly during the second five-year plan. In current prices it increased by as much as 388 per cent by 1936 and 554 per cent by 1937. Much of the increase resulted from increases in pay and in the cost of food, clothing and oil purchased by the armed forces. But it was also a real increase: the number of servicemen more than doubled, from 693,000 to 1,683,000 in 1937, a far more rapid

³ For details see *ibid.* 285–9.

⁴ Measured in ton-km of freight, and passenger km; the number of passengers carried increased by 18.7 per cent by 1937, as compared with the planned 35.5 per cent.

⁵

	1932	1936	1937
All production of armaments industries	2795 ¹	6620 ¹	9759 ²
All Group A production ³	23143	50915	55254
Armaments industries as percent of all Group A	12.1	13.0	17.7

These figures are in million rubles at 1926/27 prices.

Sources: ¹ RGAE, 4372/91/2112, 118–116 (dated May 20, 1937).

² RGAE, 4372/92/265. 1 (dated July 13, 1940).

³ RGAE, 1562/529/2383, 2–5 (1948?).

Note: These figures include civilian production by the armaments industries, which declined as a proportion of production in these industries from 1936 onwards. But they do not include armaments production by civilian industry.

increase than that in non-agricultural employment as a whole, and their standard of living improved.

The expansion of all these sectors rested to a large extent on the availability of investment. Between 1932 and 1937, investment measured in current prices increased by 77 per cent; the increase was over 96 per cent between 1932 and 1936 (investment declined in 1937). Measurement by the Powell index shows an increase of 81 per cent by 1936 and 57.8 per cent by 1937 (see Table 13). This is consistent with other Western estimates, which indicate that national income as a whole increased by 56.4 per cent by 1937, while construction remained a constant proportion of national income.⁶

During these years major changes took place in the distribution of investment between the different sectors of the economy. Between 1933 and both 1936 and 1937 investment in Narkomtyazhprom declined from 41 to 29 per cent of all investment. If the armaments industries are excluded, investment in Narkomtyazhprom fell to 24 per cent in 1936 and 22 per cent in 1937. Heavy industry's share of all investment was no higher than in the late 1920s.⁷ In contrast, investment in the food and consumer goods industries (including internal trade) between 1932 and 1937 increased from 7.9 to 9.0 per cent of all investment, on education and health from 2.3 to 4.8, and in transport from 11.6 to 13.1 per cent. Investment by the state in agriculture declined from 12.2 to 8.6 per cent, primarily owing to the great reduction in investment in the state farms following their poor performance. The proportions of the different sectors were roughly the same in 1936 as in 1937, except that agriculture received 10.3 per cent of state investment.

Within the civilian sector of Narkomtyazhprom there were major changes in the priority in investment afforded to different industries. Measured in current prices, the allocation to the non-ferrous metals industries in 1933–7 exceeded the five-year plan by 17.4 per cent, and within this total there were great variations between sub-industries. Investment in rare metals exceeded the plan by 34.7 per cent and in nickel and tin by as much as 215 per cent. Investment in non-ferrous metals was slightly less in 1937 than in 1936. The allocations to the coal and oil industries approximately equalled the plan in terms of current prices in 1936 and 1937, which means that in real terms it was substantially less than planned. The poor relatives of heavy

⁶ See Davies, Harrison and Wheatcroft, eds (1994), Tables 1 and 4.

⁷ In 1929 the percentage was 23.4.

industry were iron and steel and chemicals, which were allocated respectively only 90.5 and 86.9 per cent of the planned amount.⁸

In spite of the reduction of investment in the iron and steel industry, it succeeded in achieving its production plan. This was largely a result of bringing into operation the substantial investment in plant undertaken during the first five-year plan. Investment in iron and steel declined annually throughout the five-year plan. These low allocations meant that few new furnaces and rolling mills were under construction by the end of the plan, and the production of iron and steel stagnated in the immediate pre-war years. In contrast, although they received allocations greater than planned, the non-ferrous metals industries, which with the exception of copper were industries new to the Soviet Union, failed to reach their planned capacity and did not achieve their production plan. But these industries had already partly completed new investment by 1937, and this was available for further expansion. The oil industry, however, failed in all respects. As a result of low investment in drilling and prospecting in the early 1930s, following the rapid expansion of production, throughout the second five-year plan production expanded very

8

Capital investment in selected branches of heavy industry, 1933–37
(million rubles at current prices)

	1933– 37 <i>five-year plan</i>	1933	1934	1935	1936	1937	1933–37 <i>actual</i>	1933–37 <i>actual as per cent of plan</i>
Non-ferrous metals ^a	3429	583	682	777	1016	965	4023	117.4
Coal ^b	2936	594	665	653	482	542	2936	100.0
Oil ^c	4230	525	832	856	1131	907	4250	100.5
Iron and steel ^d	6959	1368	1480	1389	1033	804	6074	87.3
Chemical industry	2931	388	499	488	621	551	2548	86.9

Source: RGAE, 1562/10/582^a, 7 (dated January 31, 1939).

Notes: These figures relate to enterprises in the relevant chief administrations as classified in 1937.

^a For details of sub-industries, see p. 339 above.

^b Glavugol'.

^c Glavneftedobycha, Glavneftepererabotka and Glavneftesbyt.

^d GUMP, Glavpetsstal' and Glavtrubostal'.

slowly. Oil investment rose rapidly after a slow start: in 1933 it was less than investment in coal, but by 1936 it was more than twice as high. But this substantial increase did not overcome the production lag; production continued to develop very slowly after 1937.

The most substantial increase in investment was in the defence sector, both as a proportion of all investment and in absolute terms. Investment in the armaments industries increased from 9.1 per cent of all investment in Narkomtyazhprom in 1934 to 14.5 per cent in 1936 and 23.7 per cent in 1937.⁹ Investment by Narkomoborony in airfields, barracks and other facilities almost doubled, so total investment in the defence sector rose from 7.7 per cent in 1935 to 11.3 per cent of all investment in 1936, and 12.9 per cent in 1937.¹⁰

The measurement of capital investment was somewhat unreliable, because it was normally based on reports of the input into investment, and covered only some 60–70 per cent of investment. Measurement of the outcome of investment was even more problematic. The Soviet authorities published figures for capital stock, and annual figures for its increase (known as ‘introduction into operation’ (*vvod v deistvie*)). These figures are difficult to interpret. Capital stock was valued at its price at the time it was introduced into operation, and in view of the continuing increase in costs is therefore undervalued in terms of the current prices at which new additions to

⁹ Investment in the armaments industries increased from 761 to 2,200 million rubles (see n. 00 below), while investment in Narkomtyazhprom as a whole (including armaments) increased from 8,196 to 9,266 million rubles (see Table 8).

¹⁰

Capital investment in the defence sector, 1934–37
(million rubles at current prices)

	1934	1935	1936	1937
In armaments industries	761	905 ¹	1467 ¹	2200 ²
By Narkomoborony ³	717	1186	2518	1936
Total in defence sector	1478	2091	3985	4136
All Soviet investment ⁴	23540	27157	35311	32029
Defence sector as per cent of all investment	6.3	7.7	11.3	12.9

Sources: ¹ RGAE, 4372/91/3217, 315 (dated May 20, 1937).

² RGAE, 4372/91/218, 7 (dated February 5, 1939).

³ See Harrison and Davies (1997), 380.

⁴ See Table 8 below.

stock are valued. However, both investment and stock figures provide a reasonable indication of the change in the volume of investment and capital stock over short periods of time (such as the second five-year plan).¹¹ The following table shows the relationship between investment and introduction into operation:

Capital investment and increase in capital stock, 1933–37
(million rubles in current prices)

	<i>Plan 1933– 37</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937 (prelim- inary)</i>	<i>Actual 1933–37</i>	<i>Percentage fulfilment 1933–37</i>
Investment: total	120083	18053	23540	27157	35311	33852	137913	114.8
Introduction into operation: total	132030	15897	20275	25548	29793	23323	120336	91.1
Investment: industry	62497	9890	11868	13024	15939	14446	65197	104.5
Introduction into operation: industry	69050	8418	10647	12902	13258	11050	56275	81.5

Source: RGAE, 4372/92/101, 77, 80 (May 11, 1938).

The second five-year plan intended to accelerate the increase in capital stock, so that it would substantially exceed the annual investment. In practice, while the introduction of capital into operation increased in each year in 1934–36, it was exceeded by the amount of new investment, and in 1937 it declined absolutely. The Gosplan preliminary report on the results of the second five-year plan acknowledged that ‘the plan for introduction of investment into operation approved by the XVII party congress has not been carried out in full; however, the extent of the underfulfilment cannot be established at present’.¹²

Information available on the increase of capacity in several industries, assembled by Zaleski, provides an indication of the growth in

¹¹ For a devastating memorandum to Andreev, ‘On capital stock and capital investment’, dated December 8, 1938, signed by Cherkasskii, see RGASPI, 17/120/283, 197–200. This report was prepared to show the unreliability and dishonesty of the old management of TsUNKhU, and exaggerated the undoubted defects.

¹² RGAE, 4372/92/101, 286 (1938).

capital stock during the five-year plan. In every case except sugar refining, the capacity installed was less than planned:

	<i>Actual increase in production capacity during second five-year plan (percentage)</i>	<i>Planned increase in production capacity during second five-year plan (percentage)</i>
Power stations	72.8	132.1
Blast furnaces	50.9	112.5
Open-hearth furnaces	53.5	95.8
Rolling mills	128.6	171.4
Sugar refineries	52.3	41.5

Source: derived from Zaleski (1980), 256–7.

The programme for the construction of education facilities was reasonably successful. But in spite of much effort and publicity the amount of new housing constructed was small. Investment in housing, measured in current prices, exceeded the five-year plan, but the amount of new housing constructed reached only 42 per cent of the plan. Housing costs, planned at 179r per m², rose by 1937 to 784r, and averaged 468r over 1933–37 as a whole.¹³ The amount constructed only slightly exceeded the amount constructed during the first five-year plan.¹⁴

Housing: investment (million rubles) and area brought into operation (living space in million m²)

	<i>1933–37 plan</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1933–37 actual</i>
Investment	11480	1737	2194	2918	2974	2746	12569
Area brought into operation	64.0	7.2	6.0	4.6	5.5	3.5	26.8

Source: RGAE, 1562/1/1039, 79–77 (1938?).

Note: In post-war statistics, housing was shown in terms of *total* space built (including hallways, etc.). In these terms the area brought into operation in 1933–37 amounted to 38.3 m². New housing in 1939 amounted to 6.0 million m². Figures for 1938 and 1940 have not been traced.

¹³ Estimated from data in table below.

¹⁴ The amount constructed during the first five-year plan amounted to 22.3 million m² (*Itogi pervogo* (1933)), 186.

This was a qualitatively new period in Soviet industrialisation. During the first five-year plan economic development had been 'extensive', in the sense that it relied on the expansion of the urban labour force. With the huge influx of labour, primarily migrating from the countryside, the average length of employment halved, and the proportion of young workers greatly increased (see vol. 4, pp. 443–5). Output per worker in industry had probably declined, and it declined very considerably in the building industry (see vol. 4, p. 468).

During the second five-year plan the non-agricultural labour force increased much more slowly. The labour force increased by 24.2 per cent in industry, and 16.6 per cent on the railways, and actually declined by 27 per cent in capital construction (see Table 18). But production increased much more rapidly. In industry the increase was at least 62 per cent, and it may have doubled; construction increased by about 58 per cent, and rail traffic approximately doubled. So labour productivity (output per worker) substantially increased. According to official figures it rose by 82 per cent in industry, 83 per cent in construction and 48 per cent in railway transport.¹⁵ For the railways and construction, these figures are approximately correct. The most careful Western estimate for industry by Hodgman shows a productivity increase of 65 per cent.

The increase in productivity was due partly to the more intensive use and better organisation of labour. The Stakhanov movement was a striking example of the encouragement of harder work through a mixture of economic incentives and exhortation. But as we have seen (p. 298 above) the positive effect of Stakhanovism as such was primarily confined to a leap forward in the fourth quarter of 1935. The longer-term improvement in productivity resulted from other factors. The quality of the labour force improved. The average length of the period in which the average worker had been employed in industry increased: in 1932 only one-third of all workers had been employed for five years or more; by 1937 this had increased to over 50 per cent.¹⁶ The longer work experience was accompanied by the improvement of skills. Many workers were trained on the job, and acquired the 'technical minimum' launched by the December 1935 party plenum. According to Soviet estimates in May 1937, by the end of the year three-quarters of the workers in industry and transport would have

¹⁵ *Vypolnenie vtorogo* (1939), 70, 73.

¹⁶ Davies, Harrison and Wheatcroft, eds (1994), 97.

reached the standard of the technical minimum.¹⁷ Some 1.4 million of the approximately 5 million new workers in the second five-year plan had been trained at factory schools.¹⁸ At the higher level, the number of students in technical schools and their equivalent increased by 19.2 per cent and the number in higher education by 8.2 per cent in 1932–7.¹⁹ These improvements should not be exaggerated. In 1937 a clear majority of the labour force were ex-peasants who had migrated from the countryside in the previous ten years, and most workers had received only four years' formal school education. Professional and semi-professional personnel were still a small minority.

Two industries were particularly affected by labour problems: coal and timber. Although wages in the coal industry were relatively high, and a minority of workers could obtain very high wages as Stakhanovites, labour shortage was endemic, especially at the coal face. The number of workers in the industry increased by about 7 per cent in 1933, but remained constant between 1933 and 1937, while in industry as a whole it increased by one-third. While a cadre of skilled miners was established by 1937, the proportion of unskilled workers, and their rate of turnover, remained very high. The timber industry had relied on peasant labour and horses for a large part of its production: both the decline in the number of horses and collectivisation adversely affected the traditional arrangements. The industry suffered from a chronic labour shortage, which remained in spite of the extensive use of both material incentives and coercion.

Mechanisation played an important part in the increase in labour productivity, especially in industries such as mining where manual labour had predominated.²⁰ The number of kilowatt hours of energy used per worker in industry was estimated to have increased by 88.7 per cent in 1932–37.²¹ The more efficient use of fuel and materials also increased productivity.

A major factor in the growth of labour productivity and of production was the more efficient use of capital. Within a few months of the belated approval and publication of the five-year plan in

¹⁷ *Industrialisatsiya 1933–1937* (1971), 603.

¹⁸ Davies, Harrison and Wheatcroft, eds (1994), 102; *Vypolnenie vtorogo* (1939), 61.

¹⁹ *Vypolnenie vtorogo* (1939), 121.

²⁰ In coal cutting mechanisation increased from 65.4 per cent in 1932 to 89.6 per cent in 1937, in haulage from the coal face (*otkatka*) from 15.0 to 47.6 per cent (*Vypolnenie vtorogo* (1939), 89).

²¹ *Vypolnenie vtorogo* (1939), 88.

November 1934, investment decisions, particularly in heavy industry, had to be drastically modified because insufficient investment was available to support all the projects listed in the plan. In spite of the cancellation and delay of many of their projects, some major industries, including electric power, iron and steel, vehicles and machine tools, nevertheless approximately reached the production plan for 1937 approved in the five-year plan, and nearly reached it in 1936. This was largely because the available capital was used much more efficiently. The cuts in planned investment were directed towards those projects which were not scheduled to come into operation until 1937 or later years. As a result, in several industries, notably iron and steel, and vehicles, production failed to increase in the remaining years before the German invasion.

In other heavy industries, including coal, oil and several branches of machine building, the failure to supply the investment planned was a major factor in their failure to reach the production target; in the coal industry labour shortages exacerbated the situation.

On the railways, the situation was similar to that in the successful heavy industries. As a result of inadequate investment, the number of new railway lines constructed, and locomotives and goods wagons supplied, was far less than planned. But the speed of goods trains, the daily distance covered by locomotives and goods wagons and the average weight of a goods train substantially increased, in each case exceeding the planned indicators. Freight transported exceeded the plan in spite of the restriction of investment.

A striking feature of these three years was that the expansion of the economy (excluding agriculture) accelerated. Both the rate of growth of industrial production and the productivity of labour (output per worker) increased annually in 1934–36:

Total industrial production²²
(thousand million rubles at 1926/27 prices)

	1933	1934	1935	1936
Total production	45724	54477	66763	85839
Annual increase in per cent		19.1	22.6	28.7

²² RGAE, 1562/329/2383, 2 [1948?].

Percentage increase in productivity of labour²³

	1934	1935	1936
Industry	10.7	15.6	21.8
NKPS (railways)	2.5	6.0	24.0

Although the development of the economy in 1934–36 was on the whole outstandingly successful, it would be wrong to conclude that this progress depended on consistent and regular planning methods. First, smooth planning was combined with mobilisation campaigns, the most important of which was the Stakhanov movement, particularly in its early stages. Secondly, the financial provisions set out in the second five-year plan were swept aside in several important respects. The five-year plan assumed that rationing would continue beyond 1937, and would be abolished by gradually reducing the prices of food and consumer goods until supply and demand on the retail market were in balance. In practice, Stalin's sudden decision to end bread rationing at the end of 1934 meant that retail prices of bread were suddenly increased and the same process was applied to other food a year later (see pp. 121–9 and 173–6 above). Thirdly, in each year the original proposal for capital investment was low, but was overruled in favour of a much higher plan which was generally carried out (data in thousand million rubles):

	<i>Initial plan</i>	<i>Approved plan</i>	<i>Revised plan</i>	<i>Achieved</i>
1934	September 1933	December 1933		
	21	25		24
1935	July 1934	February 1935	July 1935	
	18	21	25	27
1936	July 1935	December 1935	May 1936	
	18	32	35	36

Fourthly, Gosplan generally sought to reduce prices every year; but its annual plans submitted to the government were in practice overruled. Thus in July 1935 Gosplan proposed that capital

²³ Published from Gosplan archives in *Industrializtsiya 1933–1937* (1971), 338–9, dated May 1937.

investment in 1936 should amount to only 17,700 million rubles and that prices should be reduced by 10,000 million rubles. But by December 1935 the investment plan for 1936 had been increased to 31,600 million rubles and the plan to reduce prices substantially had been dropped (see pp. 268–74 above).

This did not of course mean that the central authorities paid little attention to the role of costs and prices. A determined effort was made throughout these years to reduce costs, and, except for the dramatic changes due to the abolition of food rationing in 1934–35, cost reductions and productivity increases were a major aspect of these years, a striking contrast to developments in the early 1930s.

TABLES

All figures are in metric tons (tonnes)

Table 1. Number of workers and gross production by industry, 1933 and 1937

	<i>Annual average number of workers (thousands)</i>		<i>Gross production in 1926/27 prices (million rubles)</i>	
	<i>1933</i>	<i>1937</i>	<i>1933</i>	<i>1937</i>
I Power stations ^a	65	98	855	1909
II Fuel extraction	536	568	1522	2547
including coal	402	405	839	1475
III Iron ore	36	31	95	176
IV Manganese ore	7	9	15	37
V Mining-chemical	12	18	47	139
VI Non-ore extraction	11	15	50	64
VII Timber extraction and floating	913	940	1660	2238
VIII Fuel processing	38	49	1250	2108
IX Chemical	160	210	1519	4156
X Building materials ^b	319	441	740	1815
XI Glass	63	105	260	774
XII China and porcelain	29	41	137	273
XIII Iron and steel	237	332	1616	3998
XIV Non-ferrous metals	112	155	501	1437
XV Metalworking	2047	2990	11283	28594
Including machine building ^c	1764	2524	9487	2391
XVI Abrasive tar and coal-graphite products	5	9	59	184
XVII Rubber and asbestos	46	70	616	1450
XVIII Woodworking	455	631	1739	3441
XIX Matches	14	13	51	73
XX Paper	45	47	302	584
XXI Textiles	930	1216	6049	10559
including cotton textiles	448	571	3302	5216
knitwear	139	201	700	1422
XXII Tailoring	315	481	2139	3541
XXIII Leather, fur and footwear	324	476	1364	3677
XXIV Fats, soaps and perfumes	19	23	336	750
XXV Food, drink and tobacco	924	1238	9766	17513

(Continued overleaf)

Table 1. (Continued)

	<i>Annual average number of workers (thousands)</i>		<i>Gross production in 1926/27 prices (million rubles)</i>	
XXVI Salt	7	6	24	34
XXVII Printing	86	124	414	858
XXVIII Other industries	127	226	818	2580

Source: RGAE, 1562/329/4145 (1951?), 11–59.

Notes: ^a Including network and substations.

^b including extraction of materials for building and the silicate-ceramic industry.

^c Including repair factories and shops.

Table 2. Industrial production and employment, 1928, 1932–40
(gross production in million 1926/27 prices; employment in thousands of average-annual employed)

	1928	1932	1933	1934	1935	1936	1937	1938	1939	1940
All production ¹	21433	48343	45724	54477	66782	85929	95572	106834	123915	138479
Per cent increase			5.5	19.1	22.6	28.7	11.2	11.8	16.0	11.8
Large-scale production ¹	16833	38843	42030	50477	62137	80929	90166	100602	116128	123460
Per cent increase			8.2	20.1	23.1	30.2	11.4	11.6	15.4	6.3
Number employed: all industry ²		8000	7823	8158	8786	9466	10112	10357		
Per cent increase			–2.2	4.3	7.7	7.7	6.8	2.4		
Number of workers: all industry ²		6007	6006	6438	6954	7447	7924	8031		
Per cent increase			0.0	7.2	8.0	7.1	6.4	1.4		
Number of workers: large-scale industry ³	3821	7071	7075	7515	8278	8872	9079	9150	9284	9787
Per cent increase			0.1	6.2	10.2	7.2	2.3	0.8	1.5	5.4

Sources: ¹ RGAE, 1562/329/4145, 3 (1951?).

² RGAE, 4372/36/871, 34ob, 35 (1939?) Excludes cooperative artels and collective farmers working in kolkhoz enterprises, and auxiliary industrial enterprises in non-industrial commissariats. Including auxiliary industrial enterprises, in 1938 amounts to 8,474.

³ RGAE, 1562/329/4145, 10 (1951?). Includes cooperative artels and collective farmers working in kolkhoz enterprises.

Table 3. Production of capital goods in physical terms

	1928	1932	1933	1934	1935	1936	1937
Electricity (th. million kWh)	5.0	13.5	16.4	21.0	25.3	32.8	36.2
Coal (m. tons)	35.5	64.4	76.3	94.2	109.6	126.8	128.0
Crude oil (m. tons)	11.6	21.4	21.5	21.2	25.2	27.4	28.5
Pig iron (m. tons)	3.3	6.2	7.1	10.4	12.5	14.4	14.5
Crude steel (m. tons)	4.3	5.9	6.9	9.7	12.6	16.4	17.7
Rolled steel (m. tons)	3.4	4.4	5.1	7.0	9.4	12.5	13.1
High-quality steel (m. tons) ¹	0.09	0.68	0.89	1.25	1.57	2.06	2.39
Copper (th. tons)	30.0	45.0	44.3	53.2 ²	76.0 ²	100.8	97.5
Aluminium (th. tons) ³	0	0	0	14.5	25		37.7
Cement (m. tons)	1.85	3.48	2.71	3.54	4.49	5.87	5.45
Bricks (millions)	2790	4900	3822	4972	5959	8345	8666
Mineral fertilisers (m. tons)	0.14	0.92	1.03	1.40	2.32	2.84	3.24
Sulphuric acid (m. tons)	0.21	0.55	0.63	0.78	0.99	1.20	1.37
Locomotives (standard units)	478	828	941	1257	1795	1566	1582
Goods wagons—Narkomput' type (thousands) 2-axle units ⁴	13.8	19.2	17.2	26.7	85.3	67.3	58.80
Equipment for metal industries (th. tons)	0	6.9					18.4
Ball and roller bearings (millions)	0	2.0	7.0	13.4	19.3	33.9	40.1
Generators (th. kW)	75	1085	587		599 ⁵	754 ⁵	561
Electric motors (th. kW)	259	1658	1385		1651 ⁵	1653	1833
Tractors (th. 15-h.p. units)	1.8	50.8	79.9	118.1	155.5	173.2	66.5
Lorries (thousands)	0.7	23.7	39.1	54.6	76.9	131.5	180.3

Sources: Except where otherwise stated, from appropriate sections of *Promyshlennost'* (1957).

¹ See Clark (1956), 20.

² *Narodno-khozyaistvennyi plan* (1936), 121–2.

³ RGAE, 1562/329/2383, 13; *Narkhozplan 1936* (1936), 191–2.

⁴ *Zheleznodorozhnyi transport* (1970), 414.

⁵ *Narodno-khozyaistvennyi plan 1937* (1937), 70–1.

Table 4. Production of aircraft, 1933–41

	1933	1934	1935	1936	1937	1938	1939	1940	1941
Fighters									
I-5	321	350							
I-15		74	288	2					
I-15b						1104	1304		
I-16		50	531	906	1887	1175	1835	2710	356
I-153							1016	2362	64
Other	39	96	20	49	185	100			
TOTAL	360	570	839	957	2072	2370	4150	5072	420
Bombers									
TB3	307	139	74	115	23	1			
KR6/KR6A		222	48						
SB				268	926	1427	1778	2195	337
DB3/DB3F					45	399	959	1106	717
Yak4/BB22								138	62
Other	50	20		31	2	1		6	
TOTAL	357	381	122	414	996	1827	2737	3439	1137
Reconnaissance	1572	1911	836	1139	818	479	523	69	4
Training	1381	1100	327	968	1937	2695	2675	1071	1899
Passenger, etc.	423	491	397	798	210	310	251	125	
TOTAL all aircraft	4093	4453	2521	4276	6033	7690	10336	9776	3460

Source: Derived from *Samoletostroenie*, i (1992), chs 3, 4, 5 and 7.

Table 5. Production of tanks, 1933–41

	1933	1934	1935	1936	1937	1938	1939	1940	1941
Minitanks									
T27	919	14							
Small tanks									
T37/37A	138	953	1140	410					
T38				1046	216		158		
T40								41	2068
Light tanks									
T26etc	1405	1449	1378	1313	550	1054	1399	1601	102
BT2	224								
BT5	781	1103							
BT7		2	500	1061	788	1217	1397		1
BT7M				2		4	5	779	
T50									50
Medium tanks									
T28	41	51	32	101	46	100	140	13	
T34							2	115	3014
Heavy tanks									
T35	1	10	7	15	10	11	6		
KV								243	1358
TOTAL	3509	3582	3057	3948	1610	2386	3107	2793	6592

Source: Derived from Mel'tyukhov (2002), 511–36.

Table 6. Light industry

(a) Production of industrial consumer goods in physical terms, 1928, 1932–40 (thousand tons unless otherwise stated)

	1913	1928	1932	1933	1934	1935	1936	1937 <i>five-year plan</i>	1937
Cotton fibre	223	208	395						717
Cotton yarn	271	324	355						533
Cotton fabrics (million linear metres)	2582	2678	2694	2732	2733	2640	3270	5100	3448
Cotton threads (million <i>katushki</i>)	417	473	699						892
Woollen yarn	47	50	71						77
Woollen fabrics (million linear metres)	103	87	89	86	78	84	102	220	108
Linen yarn	53	62	55						98
Linen fabrics (million linear metres)	120	174	134	141	162	216	295	600	285
Raw silk (tons)	380	397	837						1624
Silk fabrics (million metres)	43	9.6	22	26	31	38	52		59
Socks and stockings (million pairs)		68	208	251	323	341	359	725	409
Underwear (million items)		6.9	27.3	36	54	63	66	16	112
Outerwear (million items)		1.4	11.7	17.2	22.4	26.0	35.9		45
Leather footwear (million pairs)	60	58	87	90	85	104	143	180	183
Window glass (million m ²)	24	34	30	30	50	70	88		79

Source: *Promyshlennost'* (1957), 312, 323, 328, 343, 354, except 1937 plan: *Vtoroi* (1934) (i), 431, 461.

Note: The second five-year plan gives much lower figures for production in 1932 by *Narkomlegprom* only of socks and stockings (154.3 million pairs) and underwear (16.3 million units). The plan for 1937 is also for *Narkomlegprom* only.

(b) Number of manual workers employed in light industry, 1933 and 1937
(thousands)

	1933			1937		
	<i>Large-scale</i>	<i>Small-scale</i>	<i>Total</i>	<i>Large-scale</i>	<i>Small-scale</i>	<i>Total</i>
Textiles	823	107	930	1099	117	1216
including: cotton textiles	443	1	444	555	12	567
Knitwear	101	36	137	150	51	201
Tailoring	282	33	315	392	89	481
Leather and fur goods, footwear	263	61	324	342	134	476
including footwear	178	44	222	231	109	340
Glassware	63	.3	63.3	103	2	105
China and earthenware	24	6	30	34	7	31
Musical instruments	9.5	1	10.5	26.9	2.8	29.7
Stationery, etc	14.2	.8	15	24	1.8	25.8
Toys	8.9	0.8	9.7	22.4	4.1	26.5
Craftware and jewellery	5.3	0.9	6.2	10.1	2.4	12.5
Total	1492.9	210.8	1703.7	2053.4	360.1	2403.5

Source: *Industrializatsiya, 1933–1937* (1971), 382–94 (1938 census of industry).

Note: Includes Categories XXI–XXIII, XXVIII–XXXI.

Table 7. Production of major food items in physical terms, 1928, 1932–40
(thousand tons unless otherwise stated)

	1928	1932	1933	1934	1935	1936	1937
Raw sugar	1283	828	995	1404	2032	1998	2421
Granulated sugar	656	438	349	487	719	1060	1032
Meat ^a	678	596	527	649	787	995	1002
Fish	840	1333	1303	1547	1520	1631	1609
Dairy products ^{b, c}	1900	1900	3500	3800	4200	5100	5000
of which: Butter ^d	82	72	124	138	159	189	185
Vegetable oil ^d	448	490	321	422	492	503	529
Preserved foods (million standard tins)	125	692	619	722	808	1002	982
Confectionery	99	511	429	522	586	764	878
Macaroni products	47	185	149	181	185	262	264
Raw alcohol (million decalitres)	23.3	36.5	38.8	47.2	60.7	69.5	76.7
Vodka and vodka products (m decalitres)	55.5	72.0					89.7
Beer (m decalitres)	39.1	42.1					89.6
Cigarettes (th. million)	49.5	57.9					89.2
Makhorka (m boxes)	3.2	3.3					5.3
Soap (40% fat equivalent)	311	357					495

Source: *Promyshlennost'* (1957), 371–405.

Notes: ^a Industrial production; does not include meat from domestic slaughter of animals.

^b In milk equivalent.

^c Excludes production by households and by kolkhozy.

^d Industrial production; excludes production by households.

Table 8A. Capital investment, 1933–37
(million rubles at current prices)

	1933	1934	1935	1936	1937
Narkomtyazhprom	7420	8396	9042	10099	9266
Narkomlegprom	513	620	713	1133	1233
Narkompishcheprom	919	924	1082	1546	1368
Narkomles	409	462	608	790	786
Narkommestpromy	0	471	574	830	552
Narkomvnutorg	0	171	214	350	363
Narkomvneshstorg	94	110	59	40	17
Komzag	194	307	357	369	255
GUKFPR	14	24	48	269 ^a	202 ^a
Narkomzem ^b	1530	1963	2320	3050	2209
Narkomsovkhozy	848	923	807	579	535
Narkomput'	2107	3037	4147	4602	4217
Narkomvod ^c	486	727	975	1249	982
GUSMP	14	41	79	137	146
Tsudotrans ^d	376	609	562	575	595
GUGVF	116	183	162	221	196
Narkomsvyaz'	184	282	304	330	263
Tsentrosoyuz	415	512	145	259	271
Cooperatives ^e	200	262	302	447	474
Narkomprosy ^f	234	355	752	896	746
Narkomzdravy ^f	173	324	357	525	805
Ispolkomy including housing cooperatives	395	503	756	550	2303
Narkomkhozy ^g	562	1121	1161	1585	
Other	850	1213	1631	4877	4245
Total	18053	23540	27157	35311	32029
included in above ^h :					
Narkomoborony	620	717	1186	2518	1936
Armaments industries	604	761	905	1467	2200
NKVD	790	1284	1852	2690	2643

Notes: For Notes see Table 8B.

Table 8B. Capital investment, 1933–37
(per cent of total in Table 8A)

	1933	1934	1935	1936	1937
Narkomvod ^c	2.69	3.09	3.59	3.54	3.07
GUSMP	0.08	0.17	0.29	0.39	0.46
Tsudotrans ^d	2.08	2.59	2.07	1.63	1.86
GUGVF	0.64	0.78	0.60	0.63	0.61
Narkomsvyaz ^e	1.02	1.20	1.12	0.93	0.82
Tsentrosoyuz	2.30	2.18	0.53	0.73	0.85
Cooperatives ^c	1.11	1.11	1.11	1.27	1.48
Narkomprosy ^f	1.30	1.51	2.77	2.54	2.33
Narkomzdravy ^f	0.96	1.38	1.31	1.49	2.51
Narkomkhozy ^g	3.11	4.76	4.28	4.49	7.19
Narkomtyazhprom	41.10	35.67	33.30	28.60	28.93
Narkomlegprom	2.84	2.63	2.63	3.21	3.85
Narkompishcheprom	5.09	3.93	3.98	4.38	4.27
Narkomles	2.27	1.96	2.24	2.24	2.45
Narkommestpromy	0.00	2.00	2.11	2.35	1.72
Narkomvnutorg	0.00	0.73	0.79	0.99	1.13
Narkomvneshorg	0.52	0.47	0.22	0.11	0.05
Komzag	1.07	1.30	1.31	1.05	0.80
GUKFPR	0.08	0.10	0.18	0.76	0.63
Narkomzem ^b	8.48	8.34	8.54	8.64	6.90
Narkomsovkhozy	4.70	3.92	2.97	1.64	1.67
Narkomput ^e	11.67	12.90	15.27	13.03	13.17
Ispolkomy including housing cooperatives	2.19	2.14	2.78	1.56	
Other	4.71	5.15	6.01	13.81	13.25
Total	100.00	100.00	100.00	100.00	100.00

Notes to Tables A and B: General Note: the figures for 1933–37 include not only capital investment which formed part of the main state plan, but also earmarked (*tselevye*), ‘outside-the-limit’ (*vnelimitye*) and ‘outside-the-plan’ investment. This expenditure, which did not form part of the main state plan, increased sharply in 1936 and 1937.

^a Komitet po delam isskustv (Committee for the Arts).

^b Includes state allocations to collective farms.

^c Includes Moscow–Volga canal.

^d Renamed Gussoshdor and transferred to NKVD in October 1935.

^e Includes artisan cooperatives of Vsekopromsovet, invalid cooperatives, fishery collective farms and integrated cooperatives.

^f Includes establishments of TsIK and Sovnarkom.

(Continued overleaf)

^g Includes establishments of TsIK and Sovnarkom, municipal electricity and Moscow Metro.

^h Narkomoborony is probably included in 'other' in full, but the NKVD figures show the situation as it stood at the end of 1937, after various projects had been transferred from civilian departments to the NKVD. They therefore include projects which are also included as part of the expenditure of different civilian departments.

Sources:

Except where otherwise stated, 1933–36: RGAE, 1562/10/468, 5 (1937). 1937: RGAE, 1562/10/502^a, 27 (1938[?]). Narkomoborony: see Harrison and Davies (1997), 381. NKVD: RGAE, 1562/10/582^a, 6.

Table 9. Capital investment in selected branches of heavy industry, 1933–37
(million rubles at current prices)

	<i>1933–37 five-year plan</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1933–37 actual</i>	<i>1933–37 actual as per cent of plan</i>
Non-ferrous metals ^a	3429	583	682	777	1016	965	4023	117.4
Coal ^b	2936	594	665	653	482	542	2936	100.0
Oil ^c	4230	525	832	856	1131	907	4250	100.5
Iron and steel ^d	6959	1368	1480	1389	1033	804	6074	87.3
Chemical industry	2931	388	499	488	621	551	2548	86.9

Source: RGAE, 1562/10/582^a, 7 (dated January 31, 1939).

Notes: These figures relate to enterprises in the relevant chief administrations as classified in 1937.

^b Glavugol'.

^c Glavneftedobycha, Glavneftepererabotka and Glavneftesbyt.

^d GUMP, Glavspetsstal' and Glavtrubostal'.

Table 10. Capital investment and increase in capital stock, 1933–37
(million rubles in current prices)

	<i>Plan 1933–37</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937 (preliminary)</i>	<i>Actual 1933–37</i>	<i>Percentage fulfilment 1933–37</i>
Investment: total	120083	18053	23540	27157	35311	33852	137913	114.8
Introduction into operation: total	132030	15897	20275	25548	29793	23323	120336	91.1
Investment: industry	62497	9890	11868	13024	15939	14446	65197	104.5
Introduction into operation: industry	69050	8418	10647	12902	13258	11050	56275	81.5

Source: RGAE, 4372/92/101, 77, 80 (May 11, 1938).

Table 11. Housing:
Capital investment (million rubles) and area brought into operation
(living space in million m²), 1933–37

	<i>1933–37 plan</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1933–37 actual</i>
Investment	11480	1737	2194	2918	2974	2746	12569
Area brought into operation	64.0	7.2	6.0	4.6	5.5	3.5	26.8

Source: RGAE, 1562/1/1039, 79–77 (1938?).

Note: In post-war statistics, housing was shown in terms of *total* space built (including hallways, etc.). In these terms the area brought into operation in 1933–37 amounted to 38.3 m². New housing in 1939 amounted to 6.0 million m². Figures for 1938 and 1940 have not been traced.

Table 12. Investment and construction costs, 1933–37

(a) Index of investment costs at current prices
(1932 = 100)

	1933	1934	1935	1936	1937
Building	104.3	103.4	99.6	100.9	105.3
Equipment	103.3	100.2	98.3	103.0	101.0
All investment	104.0	102.4	99.5	101.7	103.9

Source: RGAE, 4372/92/101, 73–76 ('Explanatory memorandum on the estimates of the results of the II five-year plan', May 11, 1938, unsigned).

Note: We have calculated the index for 'All investment' using the ratios of building and equipment given in this memorandum. The memorandum assumes that the ratio in 1937 was the same as in 1936.

(b) Index of costs of 'pure building' by type of expenditure
(1932 = 100)

	Total costs	Building materials	Labour			Overheads on labour	Administration and maintenance	Other
			Total	Wages	Output per man day			
1933	103.3	107.2	90.7	96.6	106.5	123.1	98.7	110.8
1934	105.2	111.0	95.2	113.1	118.7	137.5	82.4	110.9
1935	100.5	114.3	88.6	138.1	165.9	122.7	74.7	94.1
1936	101.0	129.4	86.1	164.6	191.1	98.4	65.1	81.5
1937 ^a	105.4	133.8	95.5	176.0	183.5	91.6	73.5	71.7
1937 ^b	105.6	136.5			209.1	121.1	69.5	58.5

Source: RGAE, 4372/92/101 (May 11, 1938), except 1937^b: *Industrializatsiya ... 1933–1937* (1970), 240–1 dated December 16, 1938.

Notes: The index of total costs differs slightly from the index in table (a); it was estimated separately by the TsUNKhU officials.

^a Preliminary figures.

^b Final figures.

Table 13. The Powell index of Soviet construction, 1928–40
(1927/28 = 100; measured in 1937 prices)

1927/28	100
1929	124
1930	161
1931	174
1932	173
1933	156
1934	188
1935	232
1936	313
1937	273
1938	269
1939	275
1940	275

Source: Calculated from data in Powell (1959).

Table 14. Increase in investment as compared with previous year, 1934–36
(million rubles at current prices)

	1934		1935		1936	
	<i>Amount of net increase above 1933</i>	<i>Percent increase above 1933</i>	<i>Amount of net increase above 1934</i>	<i>Percent increase above 1934</i>	<i>Amount of net increase above 1935</i>	<i>Percent increase above 1935</i>
1. Consumer industries ^a	91	6.5	256	17.1	1141	48.1
2. Social and cultural services ^b	939	68.8	718	31.2	528	15.4
3. Transport ^c	1172	43.3	1337	34.5	883	14.2
4. Defence ^d	254	20.8	613	41.5	1694	90.6
5. Other (net increase)	1930	29.1	458	3.6	3748	
Total	4386	32.2	3382	15.3	8154	30.0
Total includes NKVD	494	62.5	568	44.2	842	45.5

Sources: Derived from data in Table 8A; for NKVD investment, which appears under various heads in the above table, see RGAE, 1562/10/582^a, 6 (table compiled by NKVD dated January 28, 1939).

Notes: ^a Narkompishcheprom (previously Narkomsnab) and Narkomlegprom.

^b People's Commissariats of Education, Health and Municipal Services, and soviet executive committees and housing.

^c Narkomput', Narkomvod, Northern Sea Route and civil aviation.

^d Narkomoborony (construction) and investment in armaments industries.

Table 15. Main changes in the distribution of investment, 1935–36

(a) The economy as a whole

	<i>1935 investment (million rubles)</i>	<i>1936 increase in investment (million rubles)</i>	<i>Percentage increase</i>
1(a) Narkomoborony ¹ .	1186	1332	112.3
(b) Defence industries ²	905	562	62.1
Total defence-related	2091	1894	90.6
2(a) Consumer industries	2369	1140	48.1
(b) Internal trade	661	395	59.8
(c) Education and health	1109	310	28.0
(d) Agriculture	3127	502	16.1
Total consumer sector	7266	2347	32.3
3. Transport	6231	883	14.2
4. Narkomtyazhprom (excluding defence industries)	8137	495	7.4
5. Other	3432	2505^a	72.9^a
Total	27157	8154	30.5
(NKVD) ³	(1852)	(842)	(45.5)

Sources: Except where otherwise stated, derived from RGAE, 1562/10/468, 5 (1937).

¹See Harrison and Davies (1997), 380.

²RGAE, 4372/91/3217, 115 (dated May 20, 1937).

³RGAE, 1562/10/582^a, 6 (dated January 28, 1939).

Note: ^a This large increase includes an unexplained residual of 1,919 million rubles. This may partly be the increase in investment in the NKVD, and/or 'extra-limit' investment which has not been allocated to particular branches of the economy.

(b) Narkomtyazhprom
(excluding defence industries)

	1935 (million rubles)	1936 increase or decrease in investment (million rubles)	Percentage increase (+) or decrease (-) in investment
Industries with increases in 1936			
Oil ^{1,a}	856	275	+32.2
Non-ferrous metals ¹	777	239	+30.6
Chemicals ¹	488	133	+27.3
Building materials ¹	94	35	+37.2
Building industry (Glavstroiprom) ¹	81	117	+144.4
Auto industry (Glavavtoprom) ²	197	191	+96.5
Tractor industry (Glavtraktor) ²	99	24	+24.2
Agricultural machinery ² (Glavselmash)	21	30	+142.9
Total with increases	2613	1044	+40.0
Industries with decreases in 1936			
Coal (Glavugol) ¹	653	171	-26.2
Iron and steel ^{1,b}	1389	356	-25.6
Heavy engineering ³	299	56	-18.7
Transport engineering (Glavtransmash) ²	185	66	-35.7
Total with decreases	2526	649	-25.7
Net increase in all above industries		+395	
Net increase in all Narkomtyazhprom (excluding defence industries)		+495	

Sources: Consistent data for the whole of Narkomtyazhprom are not available, and these figures have been drawn from several separate tables for different commissariats and glavki formed during 1936-9 from Narkomtyazhprom, the division of which began in December 1936 with the establishment of Narkomoborony. Tables from which figures derived are collected in RGAE, 1562/10/582^a, on following folios:

¹ l. 7 (dated January 31, 1939).

² l. 4 (dated May 14, 1939) (handwritten).

³ l. 14 [1939].

Notes: ^a Includes extraction, refining and sales.

^b Includes special steels and pipes.

Table 16. The capital investment plan for 1936: the rival estimates
(million rubles at current prices)

	<i>1935 Plan (July 1935)</i>	<i>1935 9.vii</i>	<i>1935 21.vii.</i>	<i>1935 26.vii.</i>	<i>1935 28.vii.</i>	<i>1935 9.xii.</i>	<i>1936 29.v.</i>
Narkomtyazhprom	8420	5500	6000	6600	8000	8500	10005
Narkomlegprom	666	900		1050	1250	1250	1372
Narkompishcheprom	644			800	900	1130	1178
Narkomymestprom	495			345	700	930	1078
Narkomles	517	400		450	650	900	899
Narkomzem	1502	1100		1200	1400	2202	2192
Narkomput'	4068	3000	3000	3650	4100	4809	5487
Narkomoborony	1105			2245	2400	2400	
Education	361			1000	1100	1100	
Other	5675			4660	6841	8394	
Total	23453	17700	19000	22000	27341	31615	35053

Sources: 1935 plan: as given in GARF, 5446/26/66, 263 (July 26, 1935).

19.vii.35: GARF, 5446/26-4/9, 254–255, 247.

21.vii.35: Pis'ma (1996), 249–50.

26.vii.35: GARF, 5446/26/66, 263.

28.vii.35: RGASPI, 17/3/969, 1, 31–36.

9.xii.35: RGASPI, 17/3/973, 43–46, 60–63; GARF, 5446/57/38, 171–172.

29.v.36: RGAE, 4372/34/130, 145–146 (memorandum from Kviring, deputy head of Gosplan, to Molotov).

Note: 'Other' was calculated by the present author.

Table 17. Machine building

(a) Number of products of the machine-building industry, 1913, 1932, 1937 and 1947

	1913	1932	1937	1947
Steam boilers, turbines and combustion engines	5	7	9	9
Electrical engineering	3	14	14	14
Machine tools	7	19	24	25
Equipment for coal and ore industry	4	9	11	13
Equipment for peat industry	0	4	6	10
Equipment for metallurgical industry	2	4	4	4
Equipment for glass industry	0	1	4	4
Equipment for timber and woodworking industry	5	10	12	12
Equipment for paper industry	0	1	2	2
Equipment for textile, knitwear and tailoring industry	1	12	15	15
Equipment for leather and footwear industry	1	4	16	18
Equipment for printing industry	0	3	8	9
Tractors	0	2	2	2
Railway engineering	6	12	13	13
Automobiles	0	4	6	6
Ballbearings	0	1	2	2
Equipment for building and road work	0	9	10	10
Lifting and hauling equipment	1	5	5	5
Pumps and compressors	6	6	7	7
Municipal equipment	2	2	2	2
Electric and oxy-acetylene welding	0	4	6	6
Tooling and abrasives	6	6	6	6
Communications	5	9	9	9
Cables	17	17	17	17
Calculators and typewriters	0	3	5	5
Weights and measures	4	4	5	5
Cinema equipment	0	4	4	5
Culture and welfare	4	11	11	12
Total	79	187	235	247

Source: Calculated by the author from data in RGAE, 1562/329/2383, 16–39 (1948?).

Note: The table is intended to show those industries which were new and those which had an established history. It does not of course reflect the relative importance of each industry. The tractor industry is represented by only two products, caterpillar and wheeled tractors, but was responsible for 27.6 per cent of gross production of machinery; the machine-tool industry, together with tooling and abrasives, is represented by 31 producers, but was responsible for only 6.7 per cent of production (data for 1936 in 1926/27 prices – RGASPI, 85/29/342, 1r).

A few products were not manufactured in 1947, either because they were superseded or because production had been ceased temporarily in wartime and had not been resumed by 1947.

(Continued overleaf)

The large category 'agricultural engineering' has been omitted from the above tables in view of the fundamental change in its structure. In 1913 it consisted of production for peasant industry, and in 1932 and 1937 the industry increasingly shifted to the production of attachments for tractors and of machines such as combine harvesters; the earlier products were gradually superseded. The products in the industry changed as follows:

<i>1913</i>	<i>1932</i>	<i>1937</i>	<i>Total</i>
9	41	43	52

(b) Capital investment in machine building by industry served, 1933–39
(million rubles at current prices)

	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1938</i>	<i>1939</i>
Electric power	74	88	62	66	93	108	129
Machine tools	41	57	70	80	52	99	131
Total equipment including	245	294	269	239	223	302	394
Equipment for metallurgical industry	(133)	(143)	(100)	(82)	(80)	(101)	(155)
Equipment for other industries	(110)	(151)	(169)	(157)	(143)	(201)	(239)
Agricultural engineering	11	15	21	38	22	29	42
Tractors	114	30	36	59	22	29	42
Vehicles	61	79	167	369	277	249	246
Transport	186	375	597	378	232	166	185
Shipbuilding	20	19	27	61	72	108	99
Medium engineering	134	162	123	151	209	293	279
Armaments	565	840	935	1074	1416	2292	3306
(Narkomoboronprom)							
Other	38	33	43	54	98	64	136
Total	1489	1992	2350	2569	2716	3739	4989
Total less Narkomoboronprom	924	1152	1415	1495	1300	1437	1683

(c) Capital investment in machine building during first and second five-year plan
(October 1, 1928 – December 31, 1932 and 1933–37)

	<i>First five-year plan</i>		<i>Second five-year plan</i>	
	<i>Amount</i>	<i>Percentage of total excluding Narkomoboronprom</i>	<i>Amount</i>	<i>Percentage of total excluding Narkomoboronprom</i>
Electric power	274	10.2	382	6.1
Machine tools	109	4.1	300	4.8
Equipment for metallurgical industry	(279)	(10.4)	(537)	(8.6)
Equipment for food, textile and light industries	(112)	(4.2)	(345)	(5.5)
Equipment for other industries	(195)	(7.2)	(388)	(6.2)
Total equipment	586	21.8	1270	20.2
Agricultural engineering	239	8.9	107	1.7
Tractors	308	11.4	317	5.0
Vehicles	397	14.6	953	15.2
Transport	431	16.0	1766	28.1
Shipbuilding	19	0.7	198	3.2
Medium engineering	224	8.3	780	12.4
Armaments	1211		4839	
(Narkomoboronprom)				
Other	103	4.0	205	4.2
Total	3901		11117	
Total less Narkomoboronprom	2690	100.0	6278	100.0

Source of Tables (b) and (c): RGAE, 1562/10/1003^b, 6–9 (1940?).

(d) Moorsteen on civilian machine-building production (million rubles at 1937 prices)

	<i>1932</i>		<i>1933</i>		<i>1936</i>		<i>1937</i>	
	<i>Amount</i>	<i>Per cent</i>	<i>Amount</i>	<i>Per cent</i>	<i>Amount</i>	<i>Per cent</i>	<i>Amount</i>	<i>Per cent</i>
Electrical equipment	315	271	9.2	282	285	4.9		
Machine tools	177	200	6.8	357	489	8.4		
Equipment for metallurgical industry	38	67	2.3	223	234	4.0		
Agricultural machines	424	348	11.8	508	807	13.8		
Tractors	191	317	10.8	660	758	13.0		
Automotive vehicles	249	443	15.0	849	1234	21.1		
Railroad rolling stock	567	586	19.9	1039	994	17.0		
Pumps and compressors	133	121	4.1	153	148	2.5		
Lifting and hauling equipment	162	145	4.9	115	110	1.9		
Other	321	449	15.2	803	793	13.6		
Total	2577	2947	100.0	4989	5852	100.0		

Source: Moorsteen (1962), 310–11.

(e) Production of metal-cutting machine tools in physical terms
by type of machine tool (units)

	1928	1932	1937	1940
Lathes (<i>tokarnye</i>)	830	7145	15202	11523
Turret lathes (<i>revol'vernye</i>)	—	512	1806	2088
Autos and semi-autos (<i>avtomaty i poluavtomaty</i>)	—	—	894	2039
Milling machines (<i>frezernye</i>)	53	1068	3243	3701
Gear-cutting (<i>zuboobrabatyvayushchie</i>)	—	—	397	543
Boring (<i>rastochnye</i>)	—	67	131	124
Planing (<i>prodol'no-strogal'nye</i>)	146	233	303	173
Shaping (<i>poperechno-strogal'nye</i>)	35	833	3172	2048
Slotting (<i>dolbeznye</i>)	35	46	250	158
Broaching (<i>prot'yazhnye</i>)	—	—	44	68
Grinding (<i>shlifoval'nye</i>)	3	254	1839	2094
Tool-and-cutter grinding (<i>zatochnye</i>)	15	221	2045	4268
Vertical drilling (<i>vertikal'no-sverlil'nye</i>)	546	6838	12235	15251
Radial drilling (<i>radial'no-sverlil'nye</i>)	—	—	585	610
Special (<i>spetsial'nye, spetsilizirovannye i agregatnye</i>)	—	—	962	6688
Other	315	2503	5365	7061
Total	1978	19720	48473	58437

Source: *Promyshlennost'* (1957), 208–9.

Table 18. Employed population, 1928, 1932–36

(a) Number of employed persons (manual and office workers) (thousands)

	1928	1932	1933	1934	1935A	1935B	1936
Industry	3504 ^a	6729 ^a	6557 ^a	6879 ^a	7466 ^a	9002	9677
Construction	723	3126	2361	2618	2206	2268	2112
Rail transport	971	1527	1474	1603	1789	1506	1495
Water transport	104	196	189	222	245	167	180
Posts and communications	95	224	258	295	334	326	340
Trade	532	1411	1375	1465	1650	1606	1798
Education	789	1347	1463	1569	1725	1759	2000
Health	399	647	681	739	809	827	1007
Agriculture	1676	2858	2819	3094	2974	2967	2720
Other	2806	4878	5148	5197	5572	4289	4425
Total	11599	22943	22325	23681	24770	24717	25774
Total excluding agriculture	9923	20085	19506	20587	21796	21750	23054

Sources: 1928–1935A: *Trud* (1936), 10–11.

1935B and 1936: PKh, 3, 1937, 222–48.

The differences between 1935A and 1935B are due to reclassification.

Note: ^a Includes socialised small-scale industry.

(b) Average annual wage in current prices (rubles)

	1928	1932	1933	1934	1935A	1935B	1936
Large-scale industry	870	1473	1662	1927	2375	2285	2715
Small-scale industry	637	1251	1486	1520	1680		
Construction	996	1509	1641	2042	2497	2539	2884
Rail transport	859	1496	1637	1930	2311	2311	2864
Water transport	904	1509	1709	2103	2533	2689	3000
Posts and communications	776	1333	1450	1571	1944	1954	2050
Trade	783	1351	1343	1483	1851	1874	2265
Education	678	1633	1765	1941	2328	2356	3432
Health	639	1248	1413	1545	2249	2160	2348
Agriculture ^a	313	940	1082	1287	1574	1853	1853
Total ^b	763	1427	1566	1858	2280	2355	2270

Sources: 1928–1935A: *Trud* (1936), 12–13.

1935B and 1936: PKh, 3, 1937, 222–48.

Notes: ^a Includes forest economy and fisheries.^b For whole employed population, including sectors not listed and agriculture.

Table 19. Internal trade

(a) Number of urban and rural trading units, 1934–39
(thousands; January 1 of each year)

	1934	1935	1936	1937	1938	1939
Urban						
Shops	70.3	73.6	72.5	72.8	74.3	80.4
Stalls	42.4	40.6	42.7	48.3	58.7	65.8
Total	112.6	114.8	115.2	121.0	133.0	146.2
Rural						
Shops	152.5	157.0	140.6	151.5	161.8	170.7
Stalls	20.3	15.0	13.0	17.0	32.6	36.0
Total	162.7	172.1	153.5	168.4	194.4	206.6
All						
Shops	222.7	230.6	213.0	224.2	236.1	251.0
Stalls	62.6	55.6	55.7	65.2	91.3	101.8
Total	285.4	286.2	268.7	289.5	327.4	352.8

(b) Number of trading units by type of organisation, 1934–39
(thousands; January 1 of each year)

	1934	1935	1936	1937	1938	1939
State trade						
Narkomtorg	25.3	27.9	54.1	60.0	73.3	70.3
Industrial Narkoms	17.0	17.9	21.8	33.5	45.1	30.2
Prodsnaby ^a and Orsy	35.8	37.1	36.7	29.5	21.7	20.5
Other	25.1	26.1	27.1	21.5	13.9	27.3
Total	103.2	108.9	139.7	144.5	154.1	148.3
Cooperatives						
Tsentrosoyuz	161.1	158.2	110.0	124.0	152.3	182.0
Other cooperatives	21.1	19.1	19.0	20.9	21.0	22.5
Total	182.2	177.3	129.0	145.0	173.3	204.5
All trading units	285.4	286.2	268.7	289.5	327.4	352.8

Source: Tables (a) and (b): *Torgovlya za 1938* (1939), 43.

(c) Retail trade turnover, 1932–38
(million rubles at current prices)

	1932	1933	1934	1935	1936	1937	1938
Socialised trade							
Urban							
Retail trade	23388	29448	39349	52381	67568	78155	87123
Public catering ^a	4184	5701	6341	6381	7050	8453	11088
Total urban	27572	35149	45690	58762	74618	86607	98210
Rural							
Retail trade	12117	13954	15423	22125	31169	37631	40199
Public catering ^a	668	686	702	825	974	1705	1582
Total rural	12785	14640	16125	22950	32143	39336	41781
All							
Retail trade	35504	43403	54772	74506	98737	115785	127322
Public catering ^a	4852	6387	7043	7206	8024	10158	12670
Total socialised trade	40357	49789	61815	81712	106761	125943	139991
Total retail trade	48884	61589	75815	96212	122368	143293	
Includes Kolkhoz trade	7500	11800	14000	14500	15607	17800	

Source: Socialised trade: 1932: *Sovetskaya trgovlya v 1935* (1936), 59; 1933–38: *Torgovlya za 1938* (1939), 9.

Kolkhoz trade: RGAE, 4372/92/101, 230 (dated May 11, 1938).

Note: ^a Dining rooms, restaurants and cafés.

Table 20. Foreign trade

(a) Exports, 1933–40 (thousand tons)

	1933	1934	1935	1936	1937	1938	1939	1940
I From farming etc.								
1 Products for food								
Grain	1684	769	1517	321	1277	2054	277	1155
Other	101	66	41	27	47	5	4	5
Total products for food	1785	835	1558	348	1326	2059	281	1160
2 Products not for food								
Timber	6284	6486	6774	6042	5106	3232	1724	1020
Fur	4	3	3	3	2	2	1	1
Other	600	647	483	257	182	251	155	329
Total products not for food	6888	7136	7260	6302	5290	3485	1880	1350
Total from farming etc.	8673	7971	8818	6650	6616	5544	2161	2510
II Consumption goods								
3 Food, drink and tobacco	472	449	397	501	444	538	311	262
4 Industrial consumer goods	50	54	47	40	42	35	17	22
Total consumption goods	522	503	444	541	490	573	328	284

III Producer goods

5 Machinery and equipment	4	8	14	17	29	34	13	16
6 Mining and products								
Oil	4930	4316	3368	2666	1930	1388	474	874
Coal and anthracite	1818	2211	2251	1876	1314	428	182	31
Ores and concentrates	1224	1209	974	764	1352	453	467	330
Iron and steel	47	152	381	784	246	74	14	60
Non-ferrous metals	5	0	0	0	0	0	0	0
Other	347	268	240	178	204	148	47	110
Total mining and metals	8371	8156	7214	6268	5046	2492	1184	1405
7 Chemicals, fertilisers and rubber	242	611	540	622	722	853	626	357
8 Building materials and components	103	90	160	106	90	49	10	52
Total producer goods	8720	8865	7928	7013	5887	3428	1833	1830
Total exports	17917	17340	17190	14204	12989	9545	4327	4625

(b) Imports, 1933–40 (thousand tons)

	1933	1934	1935	1936	1937	1938	1939	1940
I From farming etc.								
1 Products for food	104	141	161	146	118	265	292	222
2 Products not for food	113	125	186	147	154	139	95	200
Total from farming etc.	217	266	347	293	272	404	387	422
II Consumption goods								
3 Food, drink and tobacco	61	135	122	126	106	126	38	89
4 Industrial consumer goods	1	1	1	2	1	1	1	3
Total consumption goods	62	136	123	128	107	127	39	92
III Producer goods								
5 Machinery and equipment								
For: Metalworking	57	15	18	51	41	50	51	32
Power, electrical engineering	30	15	8	17	11	11	10	14
Mining, iron and steel, oil	37	11	2	10	4	5	6	8
Lifting and handling	15	0	1	1	3	0	0	1
Food and light industry	6	0	1	8	5	0	0	0
Chemicals, timber and other ^a	26	7	6	22	28	11	6	11
Instruments, ballbearings, etc.	7	5	4	6	5	6	2	2
Tractors, agricultural machines	3	0	0	0	0	0	0	0
Ships	20	12	30	23	27	35	35	34
Other means of transport	13	2	2	1	0	1	0	0
Total machinery and equipment	214	68	73	139	113	120	112	102
6 Mining and metals								
Iron and steel	616	401	391	285	221	146	60	126
Non-ferrous metals	51	52	82	96	138	160	75	113
Other	24	37	8	64	176	160	93	3496
Total mining and metals	691	490	481	445	535	466	228	3735 ^b
7 Chemicals, fertilisers and Rubber	41	61	49	41	39	37	34	24
8 Building materials and components	12	4	186	108	238	1	0	11
Total producer goods	958	623	789	733	925	624	374	3872
Total imports	1236	1025	1259	1155	1304	1155	800	4387

Source: Tables (a) and (b): *Vneshnyaya torgovlya* (1960).

(c) Production and import of certain commodities, 1932 and 1937 (thousand tons unless otherwise stated)

	1932			1937		
	<i>A</i> <i>Production</i>	<i>B</i> <i>Import</i>	<i>Import as per cent of</i> <i>total consumption (A+B)</i>	<i>A</i> <i>Production</i>	<i>B</i> <i>Import</i>	<i>Import as per cent of</i> <i>total consumption (A+B)</i>
1 Greatly reduced import						
Zinc	13.7	10.6	43.7	81.5	2.9	3.4
Aluminium	0.9	10.4	92.0	38.4	2.5	6.1
Sectional steel	1232	331	21.2	2928	30	1.0
Steam boilers (th. m ²)	163.3	85.5	34.3	168.1	3.4	2.0
Transformers (th. kW)	3426	4000	53.7	2745	40	1.4
2 Reduced import						
Wolfram ore	0.2	3.0	93.7	1.7	2.2	77.1
Generators (th. h.p.)	1164	1716	59.6	808	429	34.7
Metalcutting machine tools (th. units)	18.1	15.6	46.3	32.2	4.0	11.0
Diesels (th. h.p.)	95.8	39.0	27.2	260	18	5.7
Tea	0.6	15.9	96.4	6.5	15.2	70.0
3 Increased import						
Copper	38.1	12.0	23.9	92.4	65.3 ^a	41.4
Lead	18.7	33.8	64.4	62.5	42.4	40.5
Nickel	0	4.0	100	2.7	9.1 ^b	77.1
Molybdenum concentrate	0.01	0.8	99.6	0.15	3.6	96.0
Tin	0	3.9	100	0.4	12.5	97.0
Rubber and art. rubber	0.1	30.7	99.8	70.6	31.0	30.5
Wool (fine and semi-coarse)	3.2	6.9	68.3	15.4	11.8	43.4

Source: RGAE, 4372/92/159, 14–11 (April 29, 1938) (rearranged by the present author).

Notes: ^a Original plan 30 (GARF, 8422/3/9, 311, dated November 21, 1936), revised to 45 on January 19, 1937 (GARF, 8422/3/10, 8–10).

^b Original plan 7 (GARF, 8422/3/9, 311, dated November 21, 1936), revised to 9.5 on January 19, 1937 (GARF, 8422/3/10, 8–10).

(d) Imports by type of commodity, 1932-38 (percentage of total import)

	1932	1933	1934	1935	1936	1937	1938
Machinery, precision tools, electrical equipment	50.1	38.1	22.1	18.0	36.1	25.3	32.3
Iron and steel	17.9	22.7	18.6	15.7	9.8	9.0	7.7
Non-ferrous metals	4.6	6.8	9.2	11.0	11.6	20.4	18.1
Wool and woollen goods	3.4	6.2	5.7	6.4	5.0	6.4	5.3
Rubber and latex	1.1	1.8	7.1	5.9	4.5	5.8	3.6
Tea	1.1	1.6	2.8	2.8	1.7	2.1	5.4
Other	19.1	22.8	34.5	42.0	21.3	32.6	32.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Estimated from data in Baykov (1946), appendix table VI.

(e) Exports and imports, 1913–40
(current world prices and constant 1927/28 world prices, million rubles)

	1913	1927/28	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940
Current world prices (‘gold rubles’)													
Exports	1506	782	1036	811	575	470	418	367	310	376	293	133	306
Imports	1375	946	1059	1105	704	348	232	241	309	292	313	214	313
Trade balance	+131	−164	−22	−294	−129	+121	+186	+126	+2	+85	−20	−81	+7
1927/28 constant world prices													
Exports	2443	782	1508	1654	1293	1257	1189	1065	844	881	787		
Imports	1998	946	1151	1366	1001	619	558	625	636	582	647		

Sources: Current world prices: *Vneshnyaya torgovlya* (1960). Prices for 1936–40 are given in 1950 rubles; we have converted these into ‘gold rubles’ by dividing them by 3.4851 (see *ibid.* 9). 1927/28 constant world prices: Dohan’s estimate in SR, xxxv (1976), 606–8.

Table 21. Currency in circulation, 1929–37 (million rubles)

January 1, 1928	1747	April 1, 1936	9397
January 1, 1933	8413	July 1, 1936	9994
April 1, 1933	7332	October 1, 1936	10490
July 1, 1933	6825	January 1, 1937	11256
October 1, 1933	6893	April 1, 1937	11267
January 1, 1934	6862	July 1, 1937	11964
April 1, 1934	6701	October 1, 1937	12909
July 1, 1934	7040	January 1, 1938	13582
October 1, 1934	7765	April 1, 1938	13978
January 1, 1935	7734	July 1, 1938	15477
April 1, 1935	7879	October 1, 1938	16319
July 1, 1935	8467	January 1, 1939	17216
October 1, 1935	9030	April 1, 1939	16572
January 1, 1936	9710	July 1, 1939	18176
		October 1, 1939	20548
		January 1, 1940	22214
		January 1, 1941	22103
		June 1, 1941	18415

The annual change in currency in circulation was therefore:

1933–19.4 per cent; 1934 +12.7 per cent; 1935 +25.5; 1936 +15.9;

1937 +20.7; 1938 +26.8; 1939 +29.0; 1940 –0.5.

Source: *Po stranitsam arkhivnykh fondov*, ii (2007), 40–2.

Table 22. State budget: plan and fulfilment, 1933–40 (million current rubles)

	<i>Revenue</i>		<i>Expenditure</i>		<i>'Surplus'</i>	
	<i>Plan</i>	<i>Actual</i>	<i>Plan</i>	<i>Actual</i>	<i>Plan</i>	<i>Actual</i>
1933	35011	40153	33231	35666	1780	4487
1934	48879	50816	47308	48307	1571	2509
1935	65901	67428	65401	66391	500	1037
1936	78715	83760	78715	81827	0	1933
1937	98070	96572	97120	93921	950	2651
1938	132638	127481	131138	124039	1500	3442
1939	156038	156014	155488	153299	550	2715
1940	183955	180241	179913	174351	4042	5890

Sources: *Otchet ... 1933* (1935); *Otchet ... 1934* (1935); *Otchet ... 1936* (1937); *Otchet ...*

1937 (1938). For reports on the years 1938–40 see *Industrializatsiya 1938–1941* (1973), 21–41.

Table 23. Prices

(a) Retail price index, 1932–37
(1932 = 100)

	1933	1934	1935	1936	1937A	1937B	1937C
<i>State and cooperative trade</i>							
1. Food products	147.9				189.1	184.4	
2. Industrial products	94.0				102.6	111.6	
3. All products	128.1		152.6		141.8	145.0	146.4 ^a
<i>Kolkhoz market prices</i>			55.3	62.3	62.0	62.3	
<i>All trade</i>						128.6	125.6 ^b

Sources: 1932–36 and 1937A: derived from data in RGAE, 4372/92/159, 53–50 (report to Voznesensky dated May 5, 1938).
 1937B: derived from data in RGAE, 4372/92/159, 71–69, 61 (report to Voznesensky by M. Bogolepov and (*illegible*), dated April 29, 1938).
 1937C: GARF, 1562/12/2095, 8–11 (report of trade turnover department of TsUNKhU dated March 1939), published in *Istoriya tsenoobrazovaniya 1929–iyun' 1941* (1973), 780–1.

Notes: ^a Urban state prices.

^b Includes public catering; excluding public catering is 123.2.

General note: Source B lists two figures for retail trade in 1932, in 1932 prices: 46.0 and 40.4 milliard rubles. The former figure evidently includes kolkhoz trade (excluding cattle), 5.6 milliard rubles in 1932. The author calculates retail trade in 1937 for all goods in 1932 prices, excluding kolkhoz trade, as 85.2 milliard rubles. It may be calculated from the data on kolkhoz trade in RGAE, 4372/92/101, 134 (dated May 11, 1938) that kolkhoz trade in 1937, excluding cattle, amounted to 23.1 milliard rubles in 1932 prices. So all state and kolkhoz trade amounted to 108.3 milliard rubles in 1932 prices, as compared with 139.3 milliard rubles at current prices. This gives an index of $139.2/108.3 = 128.6$. This is comparable with the index of 110.7 for all trade (1933 = 100) given in Source A.

(b) Change in transfer prices in Narkomtyazhprom, April 1, 1936

	<i>Planned output in 1936 (million rubles at current prices)</i>	<i>Planned output in 1936 at increased prices (million rubles at current prices)</i>	<i>Percentage increase in prices</i>
Coal	1161	2301	98.2
Peat	146	226	54.3
Iron and steel	2240	4043	80.5
Iron and manganese ore	159	277	73.0
Coking chemical	441	1062	141.8
Fire-resistant materials	121	230	89.7
Mineral raw materials	65	102	56.1
Non-ferrous mining (Glavtsvetmet)	333	528	58.7
Non-ferrous processing (Glavtsvetmetotrabortka)	465	590	22.7
Chemicals (Glavkhimprom)	544	827	52.0
Organic chemicals (Glavorgkhim)	414	557	34.6
Synthetic rubber	273	354	29.7
Cement	131	260	93.9
Locomotives	330	392	18.7
Railway wagons	772	947	22.7
Machine tools (Glavstankoprom)	515	546	6.5
Medium engineering (Glavsredmash)	219	250	14.3
Agricultural engineering (Glavselmash)	1046	1193	13.9
Other	2764	2989	8.1
Total	12139	17674	45.6

Source: GARF, 5446/1/112, 285–292 (decree 406, dated March 2, 1936), published in *Istoriya tsenoobrazovaniya 1929–iyun' 1941* (1973), 74–9.

(c) Increase in prices paid by industry, 1932-37

	<i>Increase in million rubles (1937:1932)</i>	<i>Index for 1937 (1932 = 100)</i>
1. <i>Agricultural raw materials sold to:</i>		
(a) Narkomlegprom	4520	362
(b) Narkompishcheprom	5420	230
<i>Sub-total</i>	9940	307
2. <i>Industrial raw materials, fuel and power; plus rail charges</i>		
(a) Narkomtyazhprom:		
comparable output (85 per cent of total)	8433 ^b	
all output (estimate)	9921 ^b	178
(b) Food and light industry ^a	1700	n.a.
<i>Sub-total</i>	11621 ^c	n.a.
<i>Total</i>	21561	235

Source: RGAE, 4372/92/93, 7 (dated May 31, 1938).

Notes: ^a Includes increased price of textiles.

^b Includes recalculation of imports at higher Soviet internal prices.

^c Includes increased rail charges of 890 million rubles.

Table 24. The Gulag economy

(a) Number of prisoners in camps and colonies, 1934–40
(thousands on January 1 of each year)

	<i>Camps</i>	<i>Of which 'counter-revolutionaries'</i>	<i>Colonies</i>	<i>Total</i>
1934	510	135		510
1935	725	118	240	966
1936	839	106	457	1296
1937	821	105	375	1196
1938	996	185	885	1882
1939	1317	454	355	1672
1940	1344	445	316	1666

Source: SI, 6, 1991, 11 (Zemskov).

(b) Number of special settlers, 1934–40 (thousands on January 1 of each year)

1934	1073
1935	974
1936	1017
1937	917
1938	878
1939	939
1940	998

Source: SI, 11, 1990, 6 (Zemskov).

Table 25. Agricultural operations

(a) Winter sowings (thousand hectares), 1933–35
(sowings for harvesting in following year)

	<i>1933</i>	<i>1934</i>	<i>1935</i>
August 15	1078	1614	1497
September 1	11764	15518	14967
September 15	20516	26143	27689
October 1	27054	31884	33301
October 15	31739	34553	35546
All	37190	36986	37417

(b) Spring sowings (thousand hectares), 1933–36

	1933	1934	1935	1936
March 15	344	1470	2310	4008
April 1	1897	8191	6646	9,639
April 15	10363	17111	22278	13927
May 1	25320	36229	50079	34711
May 10	42498	56946	68718	62161
May 15	53075	67207	76330	73002
June 1	78864	88256	89104	88216
June 15	90653	94342	91219	91075
All	90860	94068	94335	94780

Source: *Osnovnye pokazateli*, May 1937, 61; totals from *Osnovnye pokazateli*, June and January–June 1937, 31.

(c) Harvested area threshed, 1931–36

	1931	1932	1933	1934	1935	1936
August 1		2313	2267	9678	8939	18340
August 15	13698	7959	12487	25490	23603	37512
September 1	28072	19431	26412	40248	41563	54844
September 15	36846	31580	41827	51511	54673	65788
October 1	46433	39045	53105	59692	63514	73400
After October 1	16316	38425	27602	20755	20057	
All	62749	77470	80707	80447	83571	77301

Sources: RGAE, 4372/32/617a, 5; *Selkhoz SSSR za 1935g* (1936), 382, 1389.

Table 26. Grain collections, 1933/34–1936/37
(thousand tons)

	1933/34	1934/35	1935/36	1936/37
Collections ^a	23247	23319	26033	23514
Zakupki	414	3587	3566	2002
Total	23661	26908	29599	25516

Source: RGAE, 4372/35/548, 11–21.

Note: ^a Includes compulsory deliveries (*obyazatel'nye postavki*), collections in kind for MTS, milling levy, return of grain loans.

Table 27. State grain stocks, 1930–41

	<i>1930</i>	<i>1931</i>	<i>1932</i>	<i>1933</i>	<i>1934</i>	<i>1935</i>	<i>1936</i>	<i>1937</i>	<i>1938</i>	<i>1939</i>	<i>1940</i>	<i>1941</i>
January 1	7838	8728	9095	8499	?	15613	21227	18676	17515	17849	15718	20454
July 1	2084	2332	1360	1997	2988	6382	9423 ^a	5453	7750	6074	5084	6362

Sources: January 1: RGAE, 8040/9/360, 34–37.

July 1: RGAE, 4372/35/548, 6.11.15–24.

Most figures are available in both sources.

Note: ^a Given as 9399 in GARF, 5446/22/129, 3.

Table 28. Number and percentage of collectivised households, 1933–39
(July 1 of each year)

	<i>Number of collectivised households (thousands)</i>	<i>Total number of households (thousands)</i>	<i>Percentage of collectivised households</i>
1933	15220	23013	66.1
1934 (January 1)	15717	22013	71.4
1935	17734	20834	89.1
1936	18448	20380	90.5
1937	18500	20497	90.3
1938	18848	20158	93.5
1939	19341	20232	95.6

Sources: 1933 and 1934: *Sots. str.*, 1935, 317.

1935: *Sots. str.*, 1936, 278–9.

1938 and 1939: *Vypolnenie plana po sel'skomu khozyaistvu na 1 oktyabrya 1939* (1939), 18–19.

Table 29. Machine-tractor stations and kolkhoz agriculture, 1933–39
(at beginning of year)

	<i>Number of MTS</i>	<i>Number of tractors in MTS (thousands)</i>	<i>Number of horse-power in MTS (thousands)</i>	<i>Percent of kolkhoz area sown using MTS</i>	<i>Number of combine harvesters (thousands)</i>	<i>Percent of kolkhoz grain and sunflower seed harvested by combine harvesters</i>
1933	2445	74.8	1077	49.3	2.2	0.1
1934	2916	123.2	1758	58.7	10.4	0.5
1935	3533	177.3	2754	63.9	15.2	1.7
1936	4375	254.7	4282	72.4	29.3	6.9
1937	5000	328.5	5856	82.8	65.0	20.1
1938	5818	365.8	6679	91.2	104.8	32.8
1939	6358	394.0	7437	93.3	127.2	39.9

Source: *MTS v vtoroi pyatiletke* (1939), 11.

Table 30. Agricultural crops apart from grain, 1933–37

	1933	1934	1935	1936	1937
Raw cotton (million tons)	1.31	1.18	1.71	2.39	2.58
Sugar beet (million tons)	8.99	11.36	16.21	16.83	21.84
Flax (thousand tons)	548	533	551	530	570
Potatoes (million tons)	49.25	57.33	69.74	60.3	65.63

Source: See Zaleski (1980), 556–7.

Table 31. Number of cattle by social sector, 1928, 1934–38
(thousands; January of each year)

	<i>Total</i>	<i>Sovkhozy etc</i>	<i>Kolkhozy</i>	<i>Collective farmers</i>	<i>Individual peasants</i>	<i>Other rural</i>	<i>Urban personnel</i>
1928	70541	180	152	762	69418		29
1934	33529	4242	8359	12575	7468		885
1935	38869	4314	10329	15966	5452	1729	1029
1936	45961	4547	13442	21238	2537	2822	1375
1937	47492	4294	14489	22251	1418	3601	1414
1938	50920	3697	14794	25111	1472	4211	1614

Source: *Vypolnenie plana narodnogo khozyaistva 1938* (1939), 90.

GLOSSARY OF TERMS AND ABBREVIATIONS USED IN TEXT

aktiv	activists [politically-active members of a community]
art.	article (stat'ya)
ASSR	Avtonomnaya Sovetskaya Sotsialisticheskaya Respublika (Autonomous Soviet Socialist Republic)
B	<i>Bol'shevik</i>
BAM	Baikalo-Amurskii Magistral' (Baikal–Amur Railway)
BBK	Belomorsko-Baltiiskii Kanal (White Sea-Baltic) or Kombinat (Combine)
BDEA	<i>British Documents on Foreign Affairs</i>
BP	<i>Byulleten' ekonomicheskogo kabineta prof. S. N. Prokopovicha</i>
brigada (pl. brigady)	brigade [form of labour organization in a factory or kolkhoz]
CC	Central Committee [of Communist Party] (Tsentral'nyi Komitet)
CCC	Central Control Commission [of Communist Party] (Tsentral'naya kontrol'naya komissiya – TsKK) [joint staff with Rabkrin]
cde.	comrade
Chekist	Operative of the 'Cheka' (Chrezvychainaya komissiya) (Extraordinary Commission [political police])
chistoe stroitel'stvo	pure building (cost of building work exclusive of equipment and erection costs)
chistka	purge
ChTZ	Chelyabinskii traktornyi zavod (Chelyabinsk tractor factory)
commercial trade	kommercheskaya trgovlya [state trade at prices above normal level]
Cooperatives	includes artisan and timber cooperatives, and cooperatives for invalids

Dal'stroi	Gosudarstvennyi trest po dorozhnomu i promyshlennomu stroitel'stvu v raione verkhnei Kolymy (State Trust for Road and Industrial Construction in the area of the Upper Kolyma) [Far Eastern Construction]
Donbass	Donetskii ugol'nyi bassein (Donetsk coal basin)
DVP	<i>Dokumenty vneshnei politiki</i> (series of books)
EAS	<i>Europe-Asia Studies</i> (formerly <i>Soviet Studies</i>)
Eksportkhleb element	(State Grain Exporting Agency) (Russian word) social group, sometimes pejorative
EZh	<i>Ekonomicheskaya zhizn'</i>
gigantomania	A policy of pursuing larger and larger units
Glavalyuminii	Glavnoe upravlenie alyuminevoi promyshlennosti NKTP SSSR (Chief Administration of the Aluminium Industry of NKTP USSR)
Glavaviaprom	Glavnoe upravlenie aviatsionnoi promyshlennosti NKTP/Narkomoboronprom SSSR (Chief Administration of the Aircraft Industry of NKTP/Narkomoboronprom USSR)
Glavkhimprom	Glavnoe upravlenie khimicheskoi promyshlennosti NKTP SSSR (Chief Administration of the Chemical Industry of NKTP USSR)
Glavmed'	Glavnoe upravlenie mednoi promyshlennosti NKTP SSSR (Chief Administration of the Copper Industry of NKTP USSR)
Glavmetall	Glavnoe upravlenie metallicheskoï promyshlennosti (Chief Administration of the Metal Industry)
Glavnikel'olovo	Glavnoe upravlenie po nikelyu i olovu NKTP SSSR (Chief Administration for Nickel and Tin of NKTP USSR)
Glavorgkhimprom	Glavnoe upravlenie organicheskoi khimicheskoi promyshlennosti NKTP SSSR (Chief Administration of the Organic Chemical Industry of NKTP USSR)
Glavredmet	Glavnoe upravlenie po redkim metallam NKTP SSSR (Chief Administration for Rare Metals of NKTP USSR)

Glavsel'mash	Glavnoe upravlenie sel'skokhozyaistvennogo mashinostroeniya i obozostroeniya NKTP SSSR (Chief Administration of Agricultural machinery and Horse-drawn Equipment of NKTP USSR)
Glavsredmash	Glavnoe upravlenie srednego mashinostroeniya NKTP SSSR (Chief Administration of Medium Engineering of NKTP USSR)
Glavstankoprom	Glavnoe upravlenie stankoinstrumental'noi promyshlennosti NKTP SSSR (Chief Administration of the Machine-Tool and Tooling Industry of NKTP USSR)
Glavstroiprom	Glavnoe upravlenie stroitel'noi promyshlennosti NKTP SSSR (Chief Administration of the Building Industry of NKTP USSR)
Glavtsinkosvinets	Glavnoe upravlenie tsinkovoi i svintsevoi promyshlennosti NKTP SSSR (Chief Administration of the Zinc and Lead Industry of NKTP USSR)
Glavtsvetmet	Glavnoe upravlenie po dobyche tsvetnykh metallov NKTP SSSR (Chief Administration for the Mining of Non-ferrous Metals of NKTP USSR)
Glavtsvetmetobrabotka	(Chief Administration for the Processing of Non-ferrous Metals of NKTP USSR)
Glavugol'	Glavnoe upravlenie ugol'noi promyshlennosti NKTP SSSR (Chief Administration of the Coal Industry of NKTP USSR)
Glavvagonprom	Glavnoe upravlenie vagonnoi promyshlennosti NKTP SSSR (Chief Administration of the Railway Wagon Industry of NKTP USSR)
Glavvoenprom	Glavnoe upravlenie voennoi promyshlennosti NKTP SSSR (Chief Administration of the Military Industry of NKTP USSR)

Glavzoloto	Glavnoe upravlenie zolotoplatinovoi promyshlennosti NKTP SSSR (Chief Administration of the Gold and Platinum Industry of NKTP USSR)
gorodok	settlement (often refers to large grain store)
Gosfond	gosudarstvennyi fond (state fund) [reserves]
Gosplan	Gosudarstvennaya planovaya komissiya (State Planning Commission)
GPU	Gosudarstvennoe Politicheskoe Upravlenie (State Political Administration [Before 1924 all Political Police, thereafter a regional section of OGPU])
Group A industry	capital goods (producer goods)
Group B industry	consumer goods (including industrially-processed food products)
GUGVF	Glavnoe upravlenie grazhdanskogo vozdushnogo flota (Chief Administration of Civil Air Force)
GUKFPR	Glavnoe upravlenie kinofoto promyshlennosti (Chief Administration of Cinema and Photography Industry)
Gulag	Glavnoe upravlenie lagerei OGPU/NKVD SSSR (Chief Administration of [Labour] Camps of OGPU/NKVD USSR)
GUMP	Glavnoe upravlenie metallurgicheskoi promyshlennosti NKTP SSSR (Chief Administration of the Metallurgical Industry of NKTP USSR)
GUSHOSSDOR	Glavnoe upravlenie shosseinykh dorog (Chief Administration of Main Roads)
GUSMP	Glavnoe upravlenie severnogo morskogo puti (Chief Administration of Northern Sea Route)
GUTAP	Glavnoe upravlenie traktornoj i avtomobil'noj promyshlennosti NKTP SSSR (Chief Administration of Tractor and Automobile Industry of NKTP USSR)
GVMU	Glavnoe voenno-mobilizatsionnoe upravlenie NKTP SSSR (Chief Military-Mobilisation Administration of NKTP USSR) [responsible for military industry except aircraft and tanks]

I	<i>Izvestiya</i>
IS	<i>Istoricheskie issledovaniye</i>
ISG	<i>Istoriya Stalinskogo Gulaga</i>
Ispolkomy	(committees of (local) soviets)
IZ	<i>Istoricheskie zapiski</i>
khlebnaya nadbavka	grain supplement [additional wage paid for increase in bread prices]
khozraschet	cost accounting
kolkhoz	kollektivnoe khozyaistvo (collective farm)
kolkhozniy rynok	collective-farm market
kolkhozsoyuz	Soyuz sel'skokhozyaistvennykh kollektivov (union of agricultural collectives)
Kolkhoztsentr	Vsesoyuznyi soyuz sel'skokhozyaistvennykh kollektivov (All-Union Union of Agricultural Collectives)
Komsomol	Kommunisticheskii soyuz molodezhi (Communist League of Youth)
Komzag	Komitet po zagotovkam sel'skokhozyaistvennykh produktov (Committee for the collection of agricultural products [under STO and then SNK])
kon'yunktura	market conditions
koopkhozy	auxiliary farms in the retail cooperatives
kopek	1/100 ruble
kos'ba	reaping
<i>KPSS v rez.</i>	<i>Kommunisticheskaya partiya Sovetskogo Soyuza v rezolyutsiakh</i> (book)
KTF	Komitet tovarnykh fondov (Committee for Supply of Commodities [includes price control]) [until August 1934]
Kuzbass	Kuznetskii bassein (Kuznetsk basin)
limit	(Russian word) ceiling
MCMB	machine-building and metalworking
mestnichestvo	localism [favouring local interests]
mobfond	mobilizatsionnyi fond (mobilisation stocks or reserves)
MOPR	Mezhdunarodnaya organizatsiya pomoshchi revolyutioneram (International Organisation of Assistance to Revolutionaries)

MORP	Mezhdunarodnoe ob"edinenie revolyutsionnykh pisatelei (International Association of Revolutionary Writers)
MTS	Mashino-traktornaya stantsiya (Machine-Tractor Station)
n., n.a., n.d.	note, not available, no date
nachsostav	nachal'stvuyushchii sostav (commanding staff)
Narkomfin	Narodnyi komissariat finansov (Peoples' Commissariat of Finance)
Narkomindel	Narodnyi komissariat inostrannykh del (People's Commissariat of Foreign Affairs)
Narkomkhozy	Narodnye komissariaty kommunal'noi ekonomiki (People's Commissariats of Municipal Economy)
Narkomlegprom	Narodnyi komissariat legkoi promyshlennosti (People's Commissariat of Light Industry)
Narkomles	Narodnyi komissariat lesnoi promyshlennosti (People's Commissariat of Timber Industry)
Narkommestpromy	Narodnye komissariaty mestnoi promyshlennosti (People's Commissariats of Local Industry)
Narkomoboronprom	Narodnyi komissariat oboronnoi promyshlennosti (People's Commissariat of Defence Industry)
Narkomoborony	Narodnyi komissariat oborony (People's Commissariat of Defence) [formerly NarkomVMD]
Narkompishcheprom	Narodnyi komissariat pishchevoi promyshlennosti (People's Commissariat of Food Industry)
Narkomprod	Narodnyi komissariat prodovol'stviya (Peoples' Commissariat of Food)
Narkomprosy	Narodnye komissariaty prosveshcheniya (People's Commissariats of Education)
Narkomput'	Narodnyi komissariat putei soobsheniya (People's Commissariat of Ways of Communication (= Transport, mainly railways))

Narkomsnab	Narodnyi komissariat snabzheniya (People's Commissariat of Supplies)
Narkomsovkhozov	Narodnyi komissariat zernovykh i zhivotnovodcheskikh sovkhozov (People's Commissariat of grain and livestock State Farms)
Narkomsvyaz'	Narodnyi komissariat svyazei (People's Commissariat of Communications (= posts and telegraph))
Narkomtorg	Narodnyi komissariat trgovli (People's Commissariat of Trade)
Narkomtrud	Narodnyi komissariat truda (People's Commissariat of Labour)
Narkomtyazhprom	Narodnyi komissariat tyazheloi promyshlennosti (NKTP) (People's Commissariat of Heavy Industry)
NarkomVMD	Narodnyi komissariat voenno-morskikh del (People's Commissariat of Military and Naval Affairs (renamed as Narkomoborony))
Narkomvneshtorg	Narodnyi komissariat vneshnei trgovli (People's Commissariat for Foreign Trade)
Narkomvnutorg	Narodnyi komissariat vnutrennei trgovli (People's Commissariat of Internal Trade)
Narkomvod	Narodnyi komissariat vodnogo khozyaistva (People's Commissariat of Water Transport)
Narkomzdrav	Narodnyi komissariat zdravookhraneniya RSFSR/SSSR (People's Commissariat of Health of the RSFSR/USSR)
Narkomzem	Narodnyi komissariat zemledeliya SSSR (People's Commissariat of Agriculture of USSR)
naryady	production instructions
naturopлата	payment in kind [for MTS services]
NEP	Novaya ekonomicheskaya politika (New Economic Policy)
nepfond	neprikosnovennyi fond (untouchable fond) [of foodstuffs, reserves]
nevyazka	disjuncture [gap between grain harvest estimate and individual components of the harvest]
NKTP	<i>see</i> Narkomtyazhprom

NKVD	Narodnyi komissariat vnutrennikhh del (People's Commissariat of Internal Affairs)
normirovshchik	rate fixer
OA	<i>Otechestvennyi arkhiv</i>
obmolot'ba	threshing
Obshchepit	Obshchestvennoe pitanie (Public Catering Administration)
obyazatel'naya postavka	compulsory delivery
OGPU	Ob"edinennoe gosudarstvennoe politicheskoe upravlenie (Unified State Political Administration [Political Police])
OI	<i>Otechestvennaya istoriya</i>
orgnabor	organizovannyi nabor (organised recruitment [of peasants for work in industry, etc.])
Orsy	Otdely rabochego snabzheniya (Departments of Workers' Supply [shops selling consumer goods in factories, etc.])
OSO	osoboe soveshchanie (Special Conference [of NKVD])
Osoaviakhim	Obshchestvo sodeistviya oborone, aviatsionnomu i khimicheskomu stroitel'stvu (Society to support defence, aviation and chemical construction)
osoby papki	special files
otkhod,	'going away' to seasonal work outside one's own
otkhodnichestvo	village or district
P	<i>Pravda</i>
passport	technical specification of piece of equipment
peregib	excesses
PKh	<i>Planovoe khozyaistvo</i>
politotdely	politicheskiye otdely (political departments)
posevnye svodki	sown area reports
prodsnaby	food supply organisations
progressivnik	worker paid by progressive piece rates
pud	0.01638 tons ¹
pusk	completion of investment project
Rabkrin	Narodnyi komissariat raboche-krest'yanskoi inspektsii (People's Commissariat of Workers' and Peasants' Inspection) [joint staff with CCC]
raspredotdel	department for the allocation of personnel

¹ Metric tons are used throughout this study.

rastsenka	rate for the job
razverstka	centralised quota
samogon	hooch
samotek	spontaneous flow
<i>Sel.khoz. 1935</i>	<i>Sel'skoe khozyaistvo SSSR: ezhegodnik 1935</i> (book)
SI	<i>Sotsial'nye issledovaniya</i>
skirdovanie	binding and stacking the reaped crop
SKP	<i>Stalin i Kaganovich: perepiska</i> (book)
smychka	alliance [between town and country]
SNK	see Sovnarkom
sorevnovanie	emulation
<i>Sots. str.</i>	<i>Sotsialisticheskoe stroitel'stvo SSSR</i> (books)
sovkhoz	sovetskoe khozyaistvo (Soviet [i.e. state] farm)
Sovnarkom (SNK)	Sovet narodnykh komissarov (Council of People's Commissars)
Soyuzkhleb	Vsesoyuznoe ob"edinenie khlebnoi pro- myshlennosti (All-Union Corporation for Grain Industry [Grain collection agency of Narkomsnab])
Soyuzsakhhar	Vsesoyuznoe ob"edinenie sakharnoi pro- myshlennosti (All-Union Corporation for Sugar Industry [Sugar collection agency of Narkomsnab])
Soyuzzagotplodovoshch	Vsesoyuznoe ob"edinenie plodnoi i ovoshchnoi promyshlennosti (All- Union Corporation for Fruit and Vegetables)
SP VSNKh	<i>Sbornik postanovlenii i prikazov</i> (VSNKh)
SPR	<i>Spravochnik partiinogo rabotnika</i> (series of books)
SR	<i>Slavic Review</i>
SS	<i>Soviet Studies</i> (later <i>Europe-Asia Studies</i>)
ST	<i>Sovetskaya torgovlya</i>
stanitsa	(large) village or settlement in North Caucasus State Political Administration [Political Police]
STO	Sovet Truda i Oborony (Council of Labour and Defence [Economic sub- committee of Sovnarkom])

strakhovka	insurance [safety margin]
SU	<i>Sobranie uzakonenii</i>
sukhovei	dry scorching winds that produced drought
supryagi	informal work teams
SV	<i>Sotsialisticheskii vestnik</i>
SZ	<i>Sobranie zakonov</i>
SZe	<i>Sotsialisticheskoe zemledelie</i>
tekhnikum	technical college
TNB	Tekhniko-normirovochnoe byuro (department in factory fixing wage rates, etc.)
tovarnye fermy	commodity units [farms], usually livestock
tovarnyi khleb	commodity or marketed grain
TOZ	Tovarishchestvo po sovmestnoi obrabotke zemli (Association for Mutual Working of Land) [Collective farm with lowest form of socialisation]
Traktorotsentr	Vsesoyuznyi tsentr mashino-traktornykh stantsii (All-Union Centre of Machine-Tractor Stations)
troika	committee or group of three persons
TSD	<i>Tragediya sovetskoi derevni</i> (series of books)
Tsentroplovodovshch'	Vsesoyuzni tsentr Sel'skokhozyaistvennoi kooperatsii po kontraktatsii, zagotovke i pererabotke plodov i ovoshchei (All Union Centre for Agricultural Cooperatives for the Contracting, Collection and Processing of Fruit and Vegetables)
Tsentrosoyuz	Vsesoyuznyi tsentral'nyi soyuz potrebitel'skikh obshchestv (All-Union Central Union of Consumers' [Cooperative] Societies)
TsGK	Tsentral'naya gosudarstvennaya komissiya po opredeleniyu urozhainosti i razmerov valovogo sbora zernovykh kul'tur (Central State Commission for Determining Yields and the Size of the Gross Harvest of Grain Crops [of SNK])
TsIK	Tsentral'nyi Ispolnitel'nyi Komitet (Central Executive Committee [of Soviets of USSR])
Tsudotrans	Tsentral'noe upravlenie dorozhnogo transporta (Chief Administration of Road Transport)

TsUNKhU	Tsentrāl'noe upravlenie narodnokhozyaistvennogo ucheta (Central Administration of National-Economic Records [statistical agency, formed in December 1931, attached to Gosplan])
Turksib	Turkestando-Sibirskaya zheleznaya doroga (Turkestan-Siberian Railway)
uchastki	parcels [of land]
Univermag	department store
Uralmashzavod	Ural'skii mashinostroitel'nyi zavod (Urals machine-building factory)
usad'ba	household plot
VATO	Vsesoyuznoe ob"edinenie avto-traktornoii promyshlennosti (All-Union Corporation of Automobile and Tractor Industry)
veksel'	bill of exchange
Vesenkha (VSNKh)	Vysshii sovet narodnogo khozyaistva (Supreme Council of National Economy)
VI	<i>Voprosy istorii</i>
VIK	<i>Voprosy istorii KPSS</i>
VKP(b)	Vsesoyuznaya Kommunisticheskaya Partiya (bol'shevikov) (All-Union Communist Party (of Bolsheviks))
VMN	Vysshaya mera nakazaniya (highest degree of punishment) [the death penalty]
vnederevenskii oborot	extra-rural marketings
Vneshtorg	see Narkomvneshtorg
VSNKh	see Vesenkha
vydvizhenets	promoted worker
zagotovka	[state] collection (usually of agricultural products)
zagotpunkt	zagotovitel'nyi punkt (collection point)
Zagotskot	Vsesoyuznoe ob"edinenie po zagotovke skota (All-Union Corporation for the [state] Collection of Livestock)
Zagotzerno	Vsesoyuznoe ob"edinenie po zagotovke zernovykh, bobovykh, krupyanykh, maslichnykh i furazhnykh kul'tur (All-Union Corporation for the Collection of Grain, Beans, Groats, Oil-seeds and Fodder)

zagraditel'nye otryady	detachments to prevent grain reaching the market
zakaz	state order
zakupki	purchases (state purchases of grain and other agricultural products)
Zaporozhstal'	(Ukrainian Zaporizhstal') Zaporozhe steel works
Zernotrest	Gosudarstvennoe ob"edinenie zernovykh sovetskikh khozyaistv (State Corporation for Grain State Farms) [of Narkomzem]
zhatva	drying and ripening the reaped grain
ZI	<i>Źa industrializatsiyu</i>
ZiM	Zavod imeni Molotova (Molotov lorry factory, Gor'kii) [formerly GAZ]
ZiS	Zavod imeni Stalina (Stalin motor-car factory, Moscow)
Zone	poyas (Russian)
ZRKy	zakrytye rabochie kooperativy (closed workers' cooperatives [mainly supply food and meals].
zven'ya	links [sub-units below brigade]

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